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FERTILIZER REPORT 1938



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Bureau of Foods and Chemistry

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FERTILIZER REPORT--1938

INTRODUCTION

All products intended for fertilizing purposes are required to be registered annually in accordance with the provisions of the Pennsylvania Fertilizer Law, Act of May 1, 1909, as amended. The dung of domestic animals, marl, lime, and wood ashes are exempt.

Section 1 requires the following information to be shown on sacks or attached cards: (a) The number of pounds of fertilizer contained in the package; (b) the name, brand, or trade mark under which the fertilizer is sold; (c) the name and principal address of the manufacturer, importer, or other person putting the fertilizer on the market in this Commonwealth; (d) guarantee for nitrogen; (e) guarantee for total phosphoric acid, except in mixed and superphosphate fertilizers; (f) guarantee for available phosphoric acid; (g) guarantee for potash soluble in distilled water.

All mixed fertilizers are required to contain at least sixteen units of plant food based upon guarantees for nitrogen, available phosphoric acid, and water soluble potash, and which guarantees must be stated in even units.

Applications for registration are forwarded to each licensed manufacturer at the end of the calendar year, and it is necessary to report on same the preceding year's tonnage sales of each brand in order that license or registration fee can be properly computed. Tonnage sales are likewise required for brands even though they are not to be re-registered.

The Agents of the Bureau of Foods and Chemistry are authorized to obtain official samples which, together with reports giving full information for each individual sample, are forwarded direct to the Laboratory where a check of records is made to determine whether the brands are registered. Where it is found that these official samples are duly registered, an analysis is conducted to ascertain whether or not the fertilizer meets its guaranteed analysis.

During the year 1938, the Agents of the Department collected 1,200 official samples, and of this number, 1,179, representing 487 brands, registered by 44 manufacturers, were subjected to analysis and classified as follows:

Complete Fertilizers	. 12 . 62 . 12 . 33	\$4 15 180 18 64 8
Total	4 87	1179

BRANDS REGISTERED AND TONNAGE SALES

The registration fee for each new brand of fertilizer is \$15, and where old brands are to be re-registered, the scale of fees is as follows: 0 to 150 tons, \$15; over 150 tons to 250 tons, \$20; over 250 tons to 400 tons, \$30; over 400 tons to 500 tons, \$40; over 500 tons, \$50.

Licenses were issued to 116 manufacturers to cover sales of their brands for the year 1938. These licenses included 1,033 brands of which 798 were mixed fertilizers and 235 so-called "base" materials such as nitrate of soda, sulphate of ammonia, bone, etc.

The 1938 applications for registration showed that 370,162 tons of all classes of fertilizers were sold during the year 1937 (compared with 318,330 tons sold during 1936) and classified as follows: Complete Fertilizers, 255,457 tons; Ground Bone Fertilizers, 2,281 tons; Superphosphate Fertilizers, 87,891 tons; Lime Phosphate Fertilizers, 6,831 tons; Ammoniated Phosphate Fertilizers, 152 tons; Rock and Potash Fertilizers, 10,499 tons; and Miscellaneous Fertilizers, including the following: Tankage, 2,791 tons; Dried Blood, 16 tons; Nitrate of Soda, 96 tons; Potash Salts, 671 tons; Sulphate of Ammonia, 470 tons; and unclassified 3,007 tons.

The 1937 tonnage figure reveals that there were supplied 8,125 tons of nitrogen, 44,582 tons of available phosphoric acid, and 16,681 tons of water soluble potash, or a total of 69,388 tons of plant food. The amount of plant food is in excess of that supplied during the year 1936, namely 58,013 tons.

CONCLUSIONS

Of the 1,179 official samples analyzed, 168 or 14.2% were found to be deficient in one or more elements of plant food, compared with guarantees to the extent of .2% or more. The proportion of deficiencis is higher than that reported for the year 1937.

Considering the plant food elements separately, 68 samples or 7.43% were found to be deficient in nitrogen, 28 or 2.38% deficient in phosphoric acid, and 81 or 8.43% deficient in water soluble potash.

Of the total number of fertilizers analyzed, 894 were complete fertilizers and 154 or 17.22% were found to be deficient, 66 or 7.38% deficient in nitrogen, 25 or 2.79% in available phosphoric acid, and 81 or 9.06% in water soluble potash.

Several official samples were obtained where the word "tobacco" formed a part of the brand name, and, upon examination, the potash content was found to be in a form other than chloride as required by law.

Two deficiencies were found in the Ground Bone Fertilizers, 2 Superphosphate Fertilizers were deficient in available phosphoric acid, and 10 samples in the Rock and Potash group were found below guarantees, 1 being deficient in available phosphoric acid and 9 deficient in water soluble potash. No deficiencies were found in the group classified as Miscellaneous Fertilizers which included 2 samples of Nitrate of Soda, 2 samples of Muriate of Potash, 3 samples of Sulphate of Ammonia, and 1 sample of Milorganite.

The average unit values, estimated from the average retail selling prices, were as follows: Nitrogen \$2.93, Available Phosphoric Acid \$1.08, Water Soluble Potash \$1.47.

The average retail selling price for Complete Fertilizers was \$30.62 a ton, compared with \$29.26 for 1937.

It is noted that 14.2% of all samples collected during the year 1938 were found to be deficient, and which deficiency is considerably higher than the previous year's inspection. While the percentage of deficiencies appears to be high, in most instances the deficiencies were balanced by overages in other elements. Where the deficiencies were found to be of a serious nature, prosecution was instituted.

TABLE I--DEFICIENCIES

		Numbe	r Deficient	in
CLASS OF FERTILIZERS	SAMPLES	NITROGEN	AVAILABLE PHOS PHORIC ACID	POTASH
Complete Fertilizers	894	66	25	72
Ground Bone Fertilizers	15	2		
Superphosphate Fertilizers	180		2	
Lime Phosphate Fertilizers	18			
Rock and Potash Fertilizers.	64		1	9
Miscellaneous Fertilizers	8			
Total	1179	68	28	81

TABLE II -- AVERAGE ANALYSES AND RETAIL PRICES

FORM OF PLANT FOOD	COMPLETE FERTILIZERS	GROUND BONE FERTIL- IZERS	SUPERPHOS- PHATE FERTIL- IZERS*	ROCK AND POTASH FERTIL- IZERS
	Per Cent	Per Cent	Per Cent	Per Cent
Nitrogen	3.14	3.02		
Total Phosphoric Acid		24.74		
Available Phosphoric Acid.	. 11.14		19.48	13.32
Potash				7.43
Selling Price 1938	\$30.62	\$40.99	\$21.01	\$25.92
Selling Price 1937	\$29.26	\$45.95	\$19.38	\$24.52

^{*}Excluding Lime Phosphate

KEY TO TABLES

The following tables include the results of chemical analyses of the official samples. Each sample was given a chemist's number and analyzed for the element or elements guaranteed.

The asterisk (*) indicates those samples found to be deficient to the extent of .2% or more.

Table III. Complete Fertilizers, furnishing Nitrogen, Available Phosphoric Acid, and Potash.

Table IV. Ground Bone Fertilizers, furnishing Nitrogen and Total Phosphoric Acid.

Table V. Superphosphate and Lime Phosphate Fertilizers, furnishi; Available Phosphoric Acid.

Table VI. Rock and Potash Fertilizers, furnishing Available Phosphoric Acid and Potash.

Table VII. Miscellaneous Fertilizers, including Nitrate of Soda, Muriate of Potash, Sulphate of Ammonia, and Milorganite.

WARNING

*"Section 5. Any person or persons selling, offering, or exposing for sale, any commercial fertilizer or any brand of the same, having a distinct trade-name, without the analysis required by section one of this act, or with an analysis stating that it contains a larger percentage of any one or more of the above-named constituents than is contained therein, or for the sale of which all the provisions of sections two and three have not been complied with, or any person violating any of the provisions of section four of this act, shall be guilty of a misdemeanor, and, on conviction, shall be sentenced to pay a fine of not less than twenty-five nor more than one hundred dollars for the first offense, and not less than two hundred dollars for each subsequent offense....."

The Department of Agriculture, as the agency charged by the Legislature with the enforcement of the provisions of the Fertilizer Law, copies of which are available upon request, insists upon strict compliance therewith.

*Act of May 1, 1909, P. L. 344 as amended.

	NITROGEN		AVAILABLE PHOSPHORIC ACID			POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. et.	P. et.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ACME GUANO CO., Baltimore, Md. Acme 1-10-5 (3166) Acme 1-10-5 (3619) Acme 2-8-10 (3175) Acme 2-8-10 (3821) Acme 2-9-5 (3815) Acme 2-9-5 (3815) Acme 2-9-5 (3815) Acme 2-12-4 (3173) Acme 2-12-4 (31818) Acme 2-12-6 (3168) Acme 3-12-6 (3169) Acme 3-12-6 (3169) Acme 3-12-6 (3172)	1.19 1.28 2.05 2.21 2.09 2.10 1.84 2.29 2.12 2.12 2.12 2.12 2.12 2.12 2.13 2.18 5.31	1.00 1.00 2.00 2.00 2.00 2.00 2.00 2.00	12.06 10.37 8.93 8.28 9.56 9.95 12.02 12.24 12.09 12.37 8.32 12.27 7.06	10.00 10.00 8.00 8.00 9.00 12.00 12.00 12.00 12.00 12.00 12.00 8.00 12.00 7.00	5.36 4.76 10.00 9.63 5.16 5.04 43.77 6.69 5.95 6.28 6.28 6.28 6.24 7.00 5.44 6.23	5.00 5.00 10.00 10.00 5.00 5.00 4.00 6.00 6.00 6.00 6.00 7.00 5.00	
THE AMERICAN AGRICULTURAL CHEMICAL							
CO., New York, N. Y. AA Champion Fertilizer 2-9-5 (2809) AA Champion Fertilizer 2-9-5 (2809) AA Champion Fertilizer 2-9-5 (2813) AA Champion Fertilizer 2-9-5 (3234) AA Champion Fertilizer 2-9-5 (3234) AA Champion Fertilizer 2-9-5 (3504) AA Champion Fertilizer 2-9-5 (3545) AA Champion Fertilizer 2-9-5 (3743) AA Climax Fertilizer 3-12-6 (2814) AA Climax Fertilizer 3-12-6 (2814) AA Climax Fertilizer 3-12-6 (3283) AA Climax Fertilizer 3-12-6 (3383) AA Climax Fertilizer 3-12-6 (3530) AA Climax Fertilizer 3-12-6 (3530) AA Climax Fertilizer 3-12-6 (3579) AA Climax Fertilizer 3-12-6 (3742) AA Coon Brand Fertilizer 1-10-5 (3387) AA Coon Brand Fertilizer 1-10-5 (3409) AA Coon Brand Fertilizer 1-10-5 (3565) AA Coon Brand Fertilizer 1-10-5 (3563) AA Coon Brand Fertilizer 1-10-5 (3588) AA Early Trucker Fertilizer 1-10-5 (3693) AA Early Trucker Fertilizer 4-8-5 (3633)	2.02 2.12 2.29 1.67 2.01 2.03 2.01 1.83 3.21 2.99 3.03 3.13 3.03 3.13 3.03 3.12 3.04 1.02 1.17 1.16 1.01 1.01 1.01 1.01	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	9.24 9.29 9.74 9.18 8.90 9.28 9.27 28.62 12.22 12.22 12.42 12.42 12.42 12.42 10.32 10.32 10.32 10.00 10.36 10.10 6.42 8.68	9.00 9.00 9.00 9.00 9.00 9.00 9.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 10.00 10.00 10.00 10.00 10.00	5.01 4.89 5.57 5.26 5.14 5.90 6.82 6.82 6.82 6.24 6.22 6.32 6.32 6.32 6.32 6.32 5.16 5.16 5.49 5.16 5.49 5.49 5.49 5.49 5.49 5.49 5.49 5.49 6.20 6.32	5.00 5.00 5.00 5.00 5.00 5.00 5.00 6.00	
AA Farmer's Friend Fertilizer 2-12-4 (2783)	2.09	2.00	*11.50	12.00	4.12	4.00	0988
AA Farmer's Friend Fertilizer 2-12-4 (2803)	2.01	2.00	12.10	12,00	4.05	4.00	
AA Farmer's Friend Fertilizer 2-12-4 (2867)	2.07	2.00	12,38	12.00	4.19	4.00	
AA Farmer's Friend Fertilizer 2-12-4 (3386)	1.96	2,00	12,81	12.00	4.01	4.00	0048
AA Farmer's Friend Fertilizer 2-12-4 (3573) AA Farmer's Friend Fertilizer 2-12-4	1,93	2,00	12.25	12.00	4.45	4.00	0000
(3658) AA Farmer's Friend Fertilizer 2-12-4	2.05	2.00	12,28	12,00	4.33	4.00	0000
(3688) AA Farmer's Friend Fertilizer 2-12-4	2.03	2,00	13.00	12.00	4.26	4.00	
(3744) AA Farmer'e Friend Fertilizer 2-12-4	2.03	2.00	12.54	12.00	4.24	4.00	
AA GINE Edge Fertilizer 2-16-4 (3137) AA Gladiator Fertilizer 4-8-7 (2815) AA Gladiator Fertilizer 4-8-7 (2816) AA Gladiator Fertilizer 4-8-7 (3139) AA Gladiator Fertilizer 4-8-7 (3280) AA Gladiator Fertilizer 4-8-7 (3280) AA Gladiator Fertilizer 4-8-7 (3383) AA Gladiator Fertilizer 4-8-7 (3887) AA Hi-Test Fertilizer 4-16-10 (3393) AA Horse Shoe Fertilizer 2-12-6 (2787) AA Horse Shoe Fertilizer 2-12-6 (2787) AA Horse Shoe Fertilizer 2-12-6 (3582) AA Horse Shoe Fertilizer 2-12-6 (3682) AA Borse Shoe Fertilizer 2-12-6 (3710) AA Old Hickory Fertilizer 2-12-6 (3710) AA Old Hickory Fertilizer 2-8-10 (2780) AA Old Hickory Fertilizer 2-8-10 (2992) AA Old Hickory Fertilizer 2-8-10 (3382) AA Old Bickory Fertilizer 2-8-10 (3382) AA Old Bickory Fertilizer 2-8-10 (3584) AA Old Bickory Fertilizer 2-8-10 (3584) AA Old Hickory Fertilizer 2-8-10 (3584) AA Old Hickory Fertilizer 2-8-10 (3582) AA Old Hickory Fertilizer 2-8-10 (3583) AA Old Hickory Fertilizer 2-8-10 (3593) AA Old Hickory Fertilizer 2-8-10 (3593) AA Pathfinder Fertilizer 4-12-4 (2825) AA Pathfinder Fertilizer 4-12-4 (3685) AA Pathfinder Fertilizer 4-12-4 (3685) AA Pathfinder Fertilizer 4-12-4 (3686) AA Pathfinder Fertilizer 4-12-4 (3686) AA Pathfinder Fertilizer 2-9-5 (3806) AA Rad Dog Fertilizer 2-9-5 (3806) AA Rad Dog Fertilizer 2-9-5 (3502) AA Red Dog Fertilizer 2-9-5 (3502) AA Red Dog Fertilizer 2-9-5 (3062) AA Two In One Fertilizer 4-16-4 (3060)	2.02 2.02 2.08 2.66 4.05 4.05 2.01 2.01 2.02 2.04 2.03 2.02 2.14 1.85 1.97 2.00 2.03 2.02 2.14 1.85 1.97 2.00 2.03 2.02 2.14 1.85 1.97 2.00 2.03 2.02 2.14 1.85 1.97 2.00 2.03 2.02 2.14 1.85 1.97 2.00 2.03 2.02 2.14 1.85 1.97 3.94 4.01 4.16 4.26 4.17 4.10 2.03 3.03 4.11 3.32 4.26 4.26 4.26 4.26 4.26 4.27 4.10 3.33 2.03 3.35 4.26 4.26 4.26	2.00 2.00 4.00 4.00 4.00 4.00 4.00 2.00 2	12.40 17.38 8.02 8.19 8.53 8.78 8.62 16.56 12.04 12.21 12.83 12.74 8.28 8.07 8.04 9.44 8.24 8.75 8.06 11.60 12.54 12.42 12.68 9.61 9.63 9.19 9.74 12.02 6.50 16.66 16.16 15.08 17.14	12,00 16,00 8,00 8,00 8,00 8,00 8,00 12,00 12,00 12,00 12,00 8,00 8,00 8,00 8,00 8,00 8,00 12,00	4.36 4.36 4.15 7.00 6.85 7.00 7.24 7.07 6.95 10.53 6.61 6.08 6.17 6.33 6.84 10.54 10.93 10.55 10.65 10.65 4.24 10.93 4.18 4.18 4.18 4.18 5.21 5.19 5.65 4.89 4.02 4.07 4.02 4.17 4.05 4.27	4.00 4.00 7.00 7.00 7.00 7.00 7.00 7.00	

MANUFACTURER AND BRAND NAME	NITR	OGEN	AVAILABLE PHOSPHORIC ACID			POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. et.	P. et.	P. ct.	P. et.	P. ct.	P. et.	P. ct.
AA Two In One Fertilizer 4-16-4 (3688) AA Two In One Fertilizer 4-16-4 (3741) Agrico Country Club Fertilizer 8-6-4	3.92 3.89	4.00 4.00	16.08 17.10	16.00 16.00	4.67 4.51	4.00	
(3687) Agrico for Corn 3-12-6 (2801) Agrico for Corn 3-12-6 (2816) Agrico for Corn 3-12-6 (2865) Agrico for Corn 3-12-6 (2914) Agrico for Corn 3-12-6 (2993) Agrico for Corn 3-12-6 (3061)	*7.23 3.25 3.14 3.08 3.20 3.11 3.02	8.00 3.00 3.00 3.00 3.00 3.00 3.00	6.68 12.06 11.91 13.12 12.49 12.78 12.30	6.00 12.00 12.00 12.00 12.00 12.00 12.00	4.70 6.57 6.28 6.29 5.93 6.91 6.17	4.00 6.00 6.00 6.00 6.00 6.00 6.00	
Agrico for Corn 3-12-6 (3298) Agrico for Corn 3-12-6 (3411) Agrico for Corn 3-12-6 (3558) Agrico for Corn 3-12-6 (3557) Agrico for Fruit 9-6-6 (2812) Agrico for Fruit 9-6-6 (2828)	3.15 3.32 3.05 3.01 8.86 9.36	3.00 3.00 3.00 3.00 9.00 9.00	11.86 12.44 12.12 12.30 6.30 5.93	12.00 12.00 12.00 12.00 6.00 6.00 12.00	6.99 6.14 6.04 6.87 5.87 6.46 4.05	6.00 6.00 6.00 6.00 6.00 6.00 4.00	
Agrico for Grein 2-12-4 (2779) Agrico for Grein 2-12-4 (2817) Agrico for Grein 2-12-4 (2866) Agrico for Grein 2-12-4 (3057) Agrico for Grein 2-12-4 (3057) Agrico for Grein 2-12-4 (3297) Agrico for Grein 2-12-4 (3485) Agrico for Grein 2-12-4 (3554)	2.03 2.00 2.08 2.06 2.13 1.93 2.02 2.08	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	*11.45 12.96 12.24 12.12 12.46 12.21 12.30	12.00 12.00 12.00 12.00 12.00 12.00 12.00	4.05 3.91 4.06 4.25 4.22 4.14 4.15	4.00 4.00 4.00 4.00 4.00 4.00 4.00	
Agrico for Grain 2-12-4 (3687) Agrico for Lawns, Treee and Shrubs	7,23	7.00	7.71	7.00	5.86	5.00	
7-7-5 (2822) Agrico for Pastures and Top Dreesing 7-6-6 (2820)	7.02	7.00	6.61	6.00	5.83	6.00	
Agrico for Pastures and Top Dressing		7.00	6.47	6.00	6.21	6.00	
Agrico for Potatoes 4-8-7 (2781) Agrico for Potatoes 4-8-7 (2800) Agrico for Potatoes 4-8-7 (2800) Agrico for Potatoes 4-8-7 (2829) Agrico for Potatoes 4-8-7 (2869) Agrico for Potatoes 4-8-7 (2869) Agrico for Potatoes 4-8-7 (2904) Agrico for Potatoes 4-8-7 (3904) Agrico for Potatoes 4-8-7 (3513) Agrico for Potatoes 4-8-7 (3513) Agrico for Potatoes 4-8-7 (3555) Agrico for Potatoes 4-8-7 (3552) Agrico for Potatoes 4-8-7 (3552) Agrico for Potatoes 4-8-10 (2861) Agrico for Potatoes 4-8-10 (2891) Agrico for Potatoes 4-8-10 (2981) Agrico for Tomatoes 4-8-10 (2819) Agrico for Truck 5-10-5 (2778) Agrico for Truck 5-10-5 (2818) Agrico for Truck 5-10-5 (2818) Agrico for Truck 5-10-5 (2868) Agrico for Truck 5-10-5 (2966) Agrico for Truck 5-10-5 (2966) Agrico for Truck 5-10-5 (3058) Agrico for Truck 5-10-5 (3058) Agrico for Truck 5-10-5 (3551) Agrico for Truck 5-10-5 (3551) Agrico for Truck 5-10-5 (3551) Agrico for Wheat 2-12-6 (3392) Agrico for Wheat 2-12-6 (3644) Agrico for Wheat 2-12-6 (3540) Agrico for Wheat 2-12-6 (3696) Agrico for Wheat 2-12-6 (3669) Agrico for Wheat 2-12-6 (3696)	7.18 4.16 *3.74 4.16 *3.74 4.03 4.00 3.86 4.01 4.07 3.89 4.01 4.02 4.01 5.07 5.27 5.27 5.27 5.27 5.21 5.10 5.23 4.91 5.04 *4.73 5.20 2.01 2.11 2.03 2.06 *1.76	7.00 4.00 4.00 4.00 4.00 4.00 4.00 4.00	6,47 8,02 8,10 8,45 8,45 8,45 8,45 8,42 8,76 8,91 8,91 8,68 8,04 14,38 10,57 10,00 10,12 10,62 9,87 10,54 10,37 10,37 10,25 11,92 11,92 12,26 11,92 12,25 12,50	6.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	6.21 7.67 7.07 6.92 7.35 7.02 7.11 7.18 6.87 7.02 *9.59 10.15 10.10 6.53 *4.72 5.18 5.29 5.16 5.17 5.26 5.16 5.17 5.60 *4.70 6.21 6.21 6.21 6.21 6.21 6.21 6.21 6.21	7.00 7.00 7.00 7.00 7.00 7.00 7.00 7.00	
ARMOUR FERTILIZER WORKS, 8altimore, Md. Armour's Big Crop 2-8-10 Fertilizer						10.00	
(2756) Armour's 8ig Crop 2-8-10 Fertilizer	1.83	2.00	8.89	3.00 8.00	10.91	10.00	
Armour'e Big Crop 2-8-10 Fertilizer	1.87	2.00	8.11	8.00	10.83	10.00	
(2923) Armour's Big Crop 2-8-10 Fertilizer	1.89	2.00	8.16	8.00	11.29	10,00	
(2984) Armour's Sig Crop 2-8-10 Fertilizer	1.95	2.00	8.32	8,00	10.60	10,00	
(3108) Armour's Sig Crop 2-8-10 Fertilizer	1.89	2.00	8.40	8.00	10.23	10.00	
(3651) Armour'e 8ig Crop 2-8-10 Fertilizer	1.93	2.00	8.92	8,00	10.14	10.00	
(3695) Armour's Big Crop 2-8-10 Fertilizer	1.97	2,00	8.92	8,00	10.50	10.00	
(3707) Armour's Big Crop 2-8-10 Fertilizer	2.01	2.00	8.43	8.00	10.88	10.00	
(3760) Armour's 8ig Crop 2-9-5 Fertilizer	2.01	2.00	9.08	9.00	5.45	5.00	
(2872) Armour's 8ig Crop 2-9-5 Fertilizer	*1.75	2.00	8.94	9,00	5.08	5.00	
(2921) Armour's 8ig Crop 2-9-5 Fertilizer	2.03	2.00	9.39	9 •00	5.01	5.00	
(3098) Armour's Big Crop 2-9-6 Fertilizer (3505)	2.01	2,00	8,90	9.00	4.92	5.00	
Armour's 8ig Crop 2-9-5 Fertilizer (3548)	1.87	2.00	9.72	9.00	5.04	5,00	
Armour's 8ig Crop 2-9-6 Fertilizer	2,03	2,00	9.99	9.00	5.09	5,00	
Armour's Big Crop 2-9-5 Fertilizer		2.00	10.14	9,00	4.85	5.00	

	NITRO	GEN	AVAIL PHOSPHO	ABLE RIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. et.	P. ct.	P. et.	P. ct.	P. et.	P. ct.
Armour'é Big Crop 2-12-2 Fertilizer	0.03	0.00	11.91	12.00	2.27	2.00	
(2922) Armour's Big Crop 2-12-4 Fertilizer	2.01	2.00		12.00	4.02	4.00	
Armour's Big Crop 2-12-4 Fertilizer	1.89	2.00	12.32	12.00	3.83	4.00	
(2876) Armour's Big Crop 2-12-4 Fertilizer	2.04	2.00	12.32	12.00	4.23	4.00	
(2926) Armour's Big Crop 2-12-4 Fertilizer	2.03	2.00	12.22	12.00	4.07	4.00	
(3096) Armour's Big Crop 2-12-4 Fertilizer	2.02	2.00	12.50	12.00	4.30	4.00	
(3456) Armour's Big Crop 2-12-4 Fertilizer	2.01	2.00	12.49	12.00	4.68	4.00	
(3533) Armour's Big Crop 2-12-4 Fertilizer	2.11	2.00	12.11	12.00	4.00	4.00	
Armour's Big Crop 2-12-4 Fertilizer	2.00	2.00	14.00	12.00	*3.36	4.00	
(3698) Armour's Big Crop 2-12-4 Fertilizer	2.04		13.26	12.00	4.04	4.00	
(3758) Armour's Big Crop 2-12-6 Fertilizer	2.07	2.00	12.24	12.00	6.01	6.00	
(2878) Armour'e Big Crop 2-12-6 Fertilizer	2.01	2.00	12.45	12.00	*6.67	6.00	
(2918) Armour's Big Crop 2-12-6 Fertilizer	2.02			12.00	*5.80	6.00	
(2924) Armour'e Big Crop 2-12-6 Fertilizer	2.02	2.00	12.00	12.00	6.08	6.00	
(3097) Armour's Big Crop 2-12-6 Fertilizer	2.01	2.00	12.31	12.00	6.06	6.00	
(3457) Armour's Big Crop 2-12-6 Fertilizer	2.02	2.00		12.00	6.16	6.00	
(3506) Armour's Big Crop 2-12-6 Fertilizer	1.86	2.00	12.01	12.00	*5.78	6.00	
(3534) Armour'e Big Crop 2-12-6 Fertilizer	2.08	2.00	13.31	12.00	6.31	6.00	
(3603) Armour's Big Crop 2-12-6 Fertilizer	2.04	2.00	12,29	12.00	6.42	6.00	
(3697) Armour's Big Crop 2-12-6 Fertilizer	2.01	2,00	12.48		6.36	6.00	
(3716) Armour'e Big Crop 3-12-6 Fertilizer	2.86	2,00	13.45	12,00	6.54	6.00	
(2880) Armour's Big Crop 3-12-6 Fertilizer	3.02	3.00	12,26	12.00		6.00	
(3102) Armour's Big Crop 3-12-6 Fertilizer	2.93	3.00	12.05	12.00	6.07	6.00	
(3454) Armour'e Big Crop 3-12-6 Fertilizer	*2.70	3.00	12.82	12.00	7.11	6.00	
(3652) Armour's Big Crop 3-12-6 Fertilizer	3.03	3,00	12.23	12.00	6.61	6.00	
(3699) Armour'e Big Crop 4-6-5 Fertilizer	3.05	3.00	12.49	12.00	6.10	5.00	
(3303) Armour's Big Crop 4-8-7 Fertilizer	*3.76	4.00	8.47	8.00	5.44	7.00	
(2759) Armour's Big Crop 4-8-7 Fertilizer	*3.80	4,00	8.59	8.00	7.15	7.00	
(2877) Armour's Big Crop 4-8-7 Fertilizer	*3.75	4.00	8.77	8.00	6.83	7.00	
(2928) Armour's Big Crop 4-8-7 Fertilizer	3.88	4.00	8.40	8,00	7.54	1	
(3759) Armour's Big Crop 4-8-8 Fertilizer	4.03	4.00	8.51	8.00	7.80	7.00	
(3110) Armour's Big Crop 4-8-8 Fertilizer	*3.80	4.00	8,09	8.00	8.42	8.00	
(3701) Armour's Big Crop 4-10-6 Fertilizer	4.04	4.00	8.78	8.00	8,11	8.00	
(3107) Armour's Big Crop 4-10-6 Fertilizer	3.83	4.00	10,07	10.00	6.82	6.00	
(3546) Armour'e Big Crop 4-12-4 Fertilizer	4.08	4.00	10.18	10,00	5.86	6.00	
(3101) Armour's Big Crop 4-12-4 Fertilizer	*3.80	4.00	12.07	12.00	4.15	4.00	
(3302) Armour's Big Crop 4-12-4 Fertilizer	3.86	4.00	12.55	12.00	4.32	4.00	
(3531) Armour's Big Crop 4-12-4 Fertilizer	4.01	4.00	12.80	12.00	4.01	4.00	
(3547) Armour's Big Crop 4-12-8 Fertilizer	4.14	4.00	12.31	12.00	4.00	4.00	
(2927) Armour's Big Crop 4-12-10 Fertilizer	4.01	4.00	12.14	12,00	7.82	8.00	
(3104) Armour's Big Crop 4-16-4 Fertilizer	4.01	4.00	12.12	12,00	10.60	10.00	
(2874) Armour's Big Crop 4-16-4 Fertilizer	4.01	4.00	16.50	16.00	4.24	4.00	
(2920) Armour's Big Crop 4-16-4 Fertilizer	3.92	4.00	16.20	16.00	4.01	4.00	
(2983)	4.03	4.00	16.94	16.00	4.14	4.00	
Armour's Big Crop 4-16-4 Fertilizer (3103) Armour's Big Crop 4-16-4 Fertilizer	3.90	4.00	16.48	16.00	4,28	4.00	
(3532)	4,13	4.00	16.52	16.00	4.21	4.00	
Armour's Big Crop 4-16-4 Fertilizer (3654)	4.07	4.00	15.86	16.00	4.53	4.00	
Armour's Big Crop 5-10-5 Fertilizer (2925)	5.26	5.00	10.12	10.00	5.28	5.00	
Armour's Big Crop 5-10-5 Fertilizer (3761)	*4.78 *4.64	5.00 5.00	11.48 8.29	10.00	5.28 8.98	5.00 8.00	
Armour'e Big Crop Grape King (2929) Armour'e Big Crop Special 2-9-5 (2981)	2.02	2.00	9.23	9.00	5.24	5.00	
Armour's Big Crop Special Mixture 1-10-5 (2760)	1.07	1.00	10.11	10,00	5.43	5.00	
Armour's Big Crop Special Mixture 1-10-5 (3458)	1.17	1.00	10.82	10.00	*4.20	6.00	
*Deficient					1		

MANUFACTURER AND BRAND NAME Found P. ct. Armour's Lawn and Garden Fertilizer 4-B-6 (2930) 4.05	Guar. P. ct. 4.00	Found P. et.	Guar. P. ct.	Found P. ct.	Guar.	As Muriate
Armour's Lawn and Garden Fertilizer		P. ct.	P. ct.	P of		274 GITTOCC
	4.00			1.00.	P. ct.	P. ct.
	4.00	9.54	9 00	*5.00	5,00	_
Armour's Special Top Dresser 10-6-4 (2757) 9.97	10.00	6.09	8.00 6.00	4.00	4.00	
Armour's Special Top Dresser 10-6-4 (2919) 10.05	10.00	6.11	6.00	4.14	4,00	
Armour's Special Top Dresser 10-6-4 (3109) *9.80	10.00	6.06	6.00	4.02	4.00	
BALTIMORE FERTILIZER COMPANY,	10000					
Baltimore, Md. Honest 1-10-5 (3269) 1.29	1.00	12.26	10.00	5.37	6.00	
Honest 1-10-5 (3B26) 1.27 Honest 2-8-10 (2842) 2.12	2.00	11.11 B.33	10.00 8.00	5,56 11.51	6,00 10,00	
Honest 2-8-10 (3829) 2.16 Honest 2-9-5 (3267) 2.25	2.00	B.B6 11.19	8.00 9.00	10.21 5.71	10,00 5,00	
Honest 2-12-6 (2840) 2.88 Honest 2-12-6 (326B) 2.24	2.00	12.28 13.71	12.00 12.00	*5.32 7.16	6.00 6.00	
Honest 2-12-6 (3827) 2.26 Honest 4-B-8 (3266) 4.03	2.00 4.00	13.61 B.26	12.00 B.00	6.27 8.54	6,00 B,00	
8AUGH & SONS COMPANY,				/		
Philadelphia, Pa. Saugh's Balanced Plant Food (3010) Baugh's Balanced Plant Food (3321) *3.68	4.00 4.00	12.42 12.42	12.00 12.00	3.96 4.73	4.00 4.00	
Baugh's Salanced Plant Food (3590) 4.32	4.00	16.54	12.00 B.00	4.42 *9.51	4.00 10.00	
Baugh's Commercial Crop Compound (3011) 2.00 8augh's Commercial Crop Compound (3119) 1.85	2.00	9.16	8.00	10.50	10,00	
Baugh's Commercial Crop Compound (3231) 2.05 Baugh's Commercial Crop Compound (3490) 2.01	2.00	9.07 8.94	8.00 8.00 B.00	9.94	10.00 10.00 10.00	
Baugh's Commercial Crop Compound (3622) Bsugh's Complete Animal Base Fertilizer (2801) 1.95	2.00	8.39 9.10	9.00	5.39	6,00	
(2901) Baugh's Complate Animal Base Fertilizer (3012) 1.95	2.00	9.55	9.00	5.03	6.00	
8augh's Completa Animal Base Fertilizer (3082) 1.86	2.00	9.39	9.00	6.04	5.00	
8augh's Complete Animal Base Fertilizer (311B) 2.03	2.00	9.59	9.00	4.97	5.00	
Saugh's Complete Animal Base Fertilizer (3237) 1.84	2.00	10.07	9.00	5.00	5.00	,
Baugh's Complete Animal Base Fertilizer (3372) 2.25	2.00	8.86	9.00	5.24	6,00	
Baugh's Complete Animal Base Fertilizer (3493) 2.03	2.00	9,86	9.00	5.10	5,00	
Baugh's Complete Animal Sase Fertilizer (3569) 2.01	2.00	9.56	9.00	5.10	5.00	
Baugh's Complete Animal Base Fertilizer (3625) 2.01	2.00	9.19	9.00	5.04	6.00 4.00	
Baugh's Corn and Oats Fertilizer (2716) 2.09 Baugh's Corn and Oats Fertilizer (3236) 2.20	2.00	12.50 13.50	12.00	4.22 4.53	4.00	
Baugh's Corn and Oats Fertilizer (3279) 2.00 Baugh's Corn and Oats Fertilizer (3623) 2.07	2.00	12.12	12.00	4.23 4.04 4.22	4,00	
Baugh's Corn and Oats Fertilizer (3873) 2.14 Saugh's Double Eagle Phosphate (3120) 2.26	2.00	12.80 12.25	12.00 12.00 12.00	6.06 6.47	6.00 6.00	
Baugh's Double Eagle Phosphate (3230) 2.29 Saugh's Double Eagle Phosphata (3375) 2.06	2.00	12.08 12.09 12.32	12.00	*6.74 6.04	6.00 6.00	
Baugh's Double Eagle Phosphate (3491) 2.02 Baugh's Double Eagle Phosphate (3570) 2.10	2.00 2.00 2.00	12.66	12,00	6.23 6.06	6.00 6.00	
Baugh's Double Eagle Phosphate (3624) 2.21 Baugh's Double Eagle Phosphate (3B72) 2.29 Baugh's Double Power Fertilizer (3009) 4.01	2.00	12.30 16.40	12.00	6.45 3.91	6.00 4.00	
Saugh's Double Power Fertilizer (3232) 4.24	4.00	16.10 17.04	16.00 16.00	4.35	4.00	
Baugh's Double Power Fertilizer (3320) 4.29 Baugh's Double Power Fertilizer (3568) 4.30 Baugh's Double Power Fertilizer (3531) 4.00	4.00	16.50 16.52	16.00 16.00	4.37 4.75	4.00	
Baugh's Excelsior Mixture (2899) Baugh's Excelsior Mixture (3227) 1.22	1.00	10.82 10.14	10.00	5.32 5.11	5.00 5.00	
Baugh's Excelsion Mixture (3317) 1.26 Baugh's Excelsion Mixture (3633) 1.30	1.00	10.08 10.46	10.00	5.21 4.86	5.00 6.00	
Baugh's Half and Half Mixture (3630) 2.01	2.00	13,22	12,00	7.39	6.00	
(2717) *3.72 Baugh's Half Century Perfection Brand	4.00	8.45	8,00	°6,63	7.00	
(2900) 4.20 Baugh's Half Century Perfection Brand	4.00	8.83	8,00	7.55	7.00	
(3121) 4.06 Raugh's Half Century Perfection Brand	4.00	8,09	8,00	7.30	7.00	
(3234) Saugh's Helf Century Perfection Brand	4.00	B.42	B.00	7.13	7.00	
(3324) 8sugh's Old Dependable Potato Grower	4.00	B.51	8.00	6.B9	10.00	
(3229) 4.03 Baugh's Potato and Truck Special (3239) 3.84	4.00 4.00	8.75 9.40	8.00 8.00	10.20 5.84	6.00	
Baugh's Three-Quarter Century Perfection Brand (3080) 3.30	3.00	12.0B	12.00	6.18	6,00	
Baugh's Three-Quarter Century Perfection Brand (3235)	3.00	11.95	12.00	6.19	6.00	
Baugh's Three-Quarter Century Perfection 8rand (3319) 3.17	3.00	12.24 5.14	12.00 5.00	6.71 *11.09	6.00 12.00	
Baugh's Tobacco Leaf Special (331B) Baugh's Trucker's Favorite (2718) 5.00 5.10	5.00	10.74 10.06	10.00	5.10 6.17	5.00 5.00	
Baugh's Trucker's Favorite (3091) Baugh's Trucker's Favorite (3228) Baugh's Trucker's Favorite (3316) 44.79	5.00	10,00	10.00	6.38 5.29	6.00 5.00	
Baugh's Trucker's Favorite (3395) 4.91	5.00	10,77	10,00	5,21 6,61	6,00 6,00	
Paugh's Wheat Fertilizer 3-12-6 (3718) 2.88	3.00	14.23 12.46	12.00 12.00	5.90 *5.52	5.00 6.00	
Baugh's Wheat Fertilizer 3-12-6 (3874) Baugh's 2-12-4 (3373) Baugh's 2-12-4 (3492) 2004	2.00	12.73 12.32	12.00	4.06	4.00	
Baugh's 2-12-4 (3492) Baugh's 2-12-4 (3717)		12,08	12.00	4.03	4.00	
*Deficient						

	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. et.	P. et.	P. et.	P. ct.	P. et.	P. ct.	P. ct.
HERBERT BRYANT, INC., Alaxendrie, Ve. Bryante Inc. 2-8-10 (3036) Bryante Inc. 2-8-10 (3475) Bryante Inc. 2-9-5 (3477) Bryante Inc. 2-12-4 (3476) Bryante Inc. 2-12-4 (3476) Bryante Inc. 3-12-6 (3043) Bryante Inc. 3-12-6 (3038) Bryante Inc. 3-12-6 (3039) Bryante Inc. 4-8-10 (3039) Bryants Inc. 4-8-10 (3036) Bryante Inc. 4-8-10 (3037) Bryante Inc. 4-12-4 (3037) Bryante Inc. 4-16-4 (3041) Bryante Inc. 5-10-6 (3040) Fish Compound 3-10-5 (3476)	2.01 1.89 2.26 2.19 2.26 3.13 3.20 4.04 4.05 4.29 5.06 2.82	2.00 2.00 2.00 2.00 2.00 3.00 3.00 4.00 4.00 4.00 4.00 5.00	8.29 8.15 9.33 12.14 12.22 12.62 12.30 8.71 8.87 12.65 16.08 10.35 11.43	8.00 8.00 9.00 12.00 12.00 12.00 12.00 8.00 8.00 12.00 16.00 10.00	11.00 9.92 5.41 4.44 5.82 6.05 6.59 6.95 10.11 4.21 4.38 4.94 5.39	10.00 10.00 5.00 4.00 6.00 6.00 7.00 10.00 4.00 4.00 5.00 5.00	
CARLISLE FERTILIZER WORKS, INC., Carlisla, Pa. Carlisle 1-10-5 (2839) Carlisle 2-9-5 (2845) Cerlisle 2-9-5 (3823) Carlisle 4-8-7 (2847) Carlisla 5-10-6 (2844)	1.31 2.20 2.30 4.15 5.62	1.00 2.00 2.00 4.00 5.00	11.00 10.63 9.70 8.23 10.49	10.00 9.00 9.00 8.00 10.00	5.30 5.41 5.78 7.44 6.63	5.00 5.00 5.00 7.00 5.00	
CENTRAL CHEMICAL CORPORATION OF MARYLAND, Hagarstown, Md. Farmrite Crown Jawel 1-10-6 (3049) Farmrite Excaleior 2-9-5 (2694) Farmrite Excalsior 2-9-5 (3044) Farmrite Excalsior 2-9-5 (3152) Farmrite Excalsior 2-9-5 (3240) Farmrite Excalsior 2-9-5 (3240) Farmrite Excalsior 2-9-5 (3472) Farmrite Excalsior 2-9-5 (3608) Farmrite Excalsior 2-9-5 (3608) Farmrite Famous Fruit Food 10-6-4 (2701)	1.07 1.03 2.37 2.00 2.01 2.00 2.13 1.90 *9.63	1.00 1.00 2.00 2.00 2.00 2.00 2.00 2.00	10.38 10.60 9.13 10.25 9.60 9.38 10.19 9.24 6.85	10.00 10.00 9.00 9.00 9.00 9.00 9.00 9.0	5.24 5.40 5.49 5.66 4.91 5.22 5.46 4.88 4.17	5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00	
Farmrite Famous Old Fish Brand 2-12-6 (2704)	2.09	2.00	12.18	12.00	6.65	6.00	
Farmrite Famous Old Fish Brand 2-12-6 (3048)	1.90	2,00	12.07	12.00	6.85	6.00	
Farmrite Famous Old Fish Brand 2-12-6 (3157) Farmrita Famous Old Fish Brand 2-12-6	2.02	2,00	12.75	12.00	6.12	6.00	
(3468) Parmrite Famous Old Fish Brand 2-12-6	2.01	2.00	12.33	12.00	6.44	6.00	
Section Sect	1.97 *3.76 4.00 4.01 4.04 2.12 2.04 2.29 2.12 8.20 *7.37 2.91 3.01 3.01 3.01 2.91 3.01 2.91 2.01 2.04 4.22 4.19 2.03 2.01 2.02 4.19 2.03 2.01 2.02 4.19 2.03 2.01 2.04 4.22 4.26 5.06 5.06	2.00 4.00 4.00 2.00 2.00 2.00 2.00 2.00	12,65 8,41 12,73 12,19 12,33 12,56 12,14 12,10 *11,51 12,34 19,68 16,20 12,14 12,29 12,58 12,38	12.00 8.00 12.00	6.69 7.26 6.00 4.48 4.56 6.44 6.10 6.45 6.46 6.11 6.27 6.84 6.23 6.94 6.33 6.94 6.33 6.94 6.33 6.94 6.33 4.13 4.03 3.97 4.83 4.13 4.13 4.13 4.13 4.13 7.20 7.10 8.64 7.39 7.54 5.75 6.11	6.00 7.00 6.00 4.00 4.00 6.00 6.00 6.00 6.00 6	
COOPERATIVE FEED DEALERS, INC., Binghentor, N. Y. C.F.D. 2-8-10 (3670) C.F.D. 2-12-4 (3252) C.F.D. 3-12-6 (2712) C.F.D. 3-12-6 (2712) C.F.D. 3-12-6 (3247) C.F.D. 4-8-7 (2713) C.F.D. 4-8-7 (3246) C.F.D. 4-12-4 (3254) C.F.D. 4-16-4 (3255) C.F.D. 4-16-6 (3261)	2.11 2.59 2.28 3.20 2.94 3.85 3.95 4.31 4.29 5.31	2.00 2.00 2.00 3.00 3.00 4.00 4.00 4.00 4.00 5.00	9.37 12.20 12.89 12.28 12.04 8.28 8.34 11.95 16.16 9.39	8.00 12.00 12.00 12.00 12.00 8.00 8.00 12.00 16.00 10.00	10.30 6.20 4.38 5.90 5.95 7.07 7.75 4.36 4.27 5.79	10.00 4.00 6.00 6.00 7.00 7.00 4.00 4.00 5.00	

MANUFACTURER AND BRAND NAME	NITROGEN		AVAILABLE PHOSPHORIC ACID		POTASH		As	
	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate	
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. et.	P. ct.	
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y. SERVICE, INC., New York, N. Y. SERVICE, INC., New York, N. Y. SERVICE, S. G. G. S. G. S. G. S. G. G. S. G. S. G. G. S. G. G. S. G. S. G. G. S. G. G. S. G. S. G. G. S. G. G. S. G. G. S. G. S. G. G. S. G. G. G. S. G. G. G. S. G. S. G. G. G. S. G. S. G. G. G. S. G. G. G. S. G. G. G. S. G. S. G.	2.25 2.10 2.13 2.02 4.18 2.10 2.11 3.38 3.30 3.17 4.11 4.38 4.03 4.01 4.03 4.01 4.02 4.02 4.02 4.02 4.03 4.01 4.02 4.02 4.03 4.01 4.02 4.03 4.01 4.02 4.03 4.01 4.02 4.03 4.01 4.02 4.03 4.01 4.03 4.01 4.02 4.03 4.01 4.02 4.03 4.01 4.03 4.01 4.02 4.03 4.01 4.03 4.01 4.02 4.03 4.03 4.01 4.03 4.01 4.02 4.03 4.03 4.01 4.03 4.01 4.02 4.03 4.03 4.01 4.03 4.03 4.01 4.02 4.03 4.03 4.03 4.03 4.03 4.03 4.03 4.03	2.00 2.00 2.00 2.00 2.00 2.00 3.00 3.00	8.22 8.60 8.39 8.96 12.20 *11.62 13.12 12.96 12.16 12.76 9.69 8.73 9.25 12.66 12.62 11.96 12.26 11.96 12.26 11.96 12.26 11.96 12.26 11.96 12.26 11.96 11.03	8.00 8.00 8.00 12.00	10.33 12.96 10.69 10.69 10.69 4.96 4.96 4.40 6.72 6.00 6.44 7.25 7.60 7.17 4.65 4.73 4.65 4.73 4.57 4.00 4.43 **2.00 5.25 5.23 5.20 5.11	10.000 10.000 10.000 4.000 4.000 4.000 6.000 5.000 6.000 7.000 7.000 7.000 7.000 4.000 4.000 4.000 4.000 4.000 4.000 4.000 5.000 5.000 5.000		
G.L.F. 5-20-5 (3264) G.L.F. 8-16-14 (3263) COOPERATIVE SOUTHERN STATES	5.13 8.64	5.00 8.00	20.80 16.82	20,00	6.40 14.29	5.00 14.00		
FERTILIZER SERVICE, INC., Baltimore, Md. Fruit Tree Special (3429)	*8.74	10,00	7.08	6.00	4.29	4.00		
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippensburg, Pa. Old Reliable Bert Special 3-12-6 (2852) Old Reliable Bert Special 3-12-6 (3833) Old Reliable Potato Grower 4-3-7 (2850) Old Reliable Tip Top 2-9-5 (2854) Old Reliable Tip Top 2-9-5 (3831)	*2.60 *2.10 3.89 2.10 *1.43	3.00 3.00 4.00 2.00 2.00	12.48 13.52 8.88 9.17 9.02	12.00 12.00 8.00 9.00 9.00	6.43 6.79 7.51 5.74 4.81	6.00 6.00 7.00 6.00 5.00		
THE DAVISON CHEMICAL CORP., Alliance, Ohio Old Reliable 2-8-10 (3773) Old Reliable 2-12-4 (3775) Old Reliable 2-12-6 (3021) Old Reliable 2-12-6 (3702) Old Reliable 2-12-6 (3793) Old Reliable 2-12-6 (3793) Old Reliable 3-12-6 (3774) Old Reliable 4-16-4 (3777)	2.02 2.09 2.16 2.05 2.05 2.05 3.00 4.09	2.00 2.00 2.00 2.00 2.00 2.00 3.00 4.00	8.92 12.26 12.96 12.88 12.66 12.64 16.70	8.00 12.00 12.00 12.00 12.00 12.00 16.00	*9.60 4.71 5.96 *5.76 6.10 6.62 4.20	10.00 4.00 6.00 6.00 6.00 6.00 4.00		
THE DAVISON CHEMICAL CORP., Baltimore, Md. Davco Granulated Fertilizer 2-8-10 (2953)	2.04	2,00	8.97	8,00	10.32	10.00		
Davco Granulated Fertilizer 2-8-10 (3349)	2.52	2,00	8.31	8.00	8.94	10.00		
Davco Granulated Fertilizer 2-8-10 (3445)	2.01	2.00	8,22	8.00	10.25	10,00		
Davco Granulated Fertilizer 2-8-10 (3767) Davco Granulated Fertilizer 2-9-5(2764) Davco Granulated Fertilizer 2-9-5(2961) Davco Granulated Fertilizer 2-9-5(3064) Davco Granulated Fertilizer 2-9-5(3269) Davco Granulated Fertilizer 2-9-5(3544) Davco Granulated Fertilizer 2-9-5(3562) Davco Granulated Fertilizer 2-9-5(3562) Davco Granulated Fertilizer 2-9-5(3766) Davco Granulated Fertilizer 2-9-5(3766) Davco Granulated Fertilizer 2-9-5(3766)	2.19 2.01 2.01 2.13 2.01 2.02 2.30	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	8.53 9.75 9.01 9.25 9.35 9.31 9.62 9.05 9.86	8.00 9.00 9.00 9.00 9.00 9.00 9.00 9.00	10.17 5.10 4.89 5.06 5.15 6.69 4.88 5.20 5.61 5.07	10.00 5.00 5.00 5.00 5.00 5.00 5.00 5.00		
Davco Granulated Fertilizer 2-12-4 (2952)	2.00	2.00	12.10	12.00	4.19	4.00		
Davco Granulated Fertilizer 2-12-4 (3144) Davco Granulated Fertilizer 2-12-4	2.01	2.00	12.88	12.00	3.98	4.00		
(3260) Davco Granulated Fertilizer 2-12-4	2.01	2.00	12.54	12,00	4.20	4.00		
(3353) Davco Granulated Fertilizer 2-12-4	1.87	2.00	11.94	12.00		4.00		
(3567) Davco Granulated Fertilizer 2-12-4	2.03	2.00	12.66	12.00	4.42	4.00		
(3725) Davco Granulated Fertilizer 2-12-4	2.01	2.00	12.94	12.00	4.20	4.00		
(3751) Davco Granulated Fertilizer 2-12-4	2.02	2.00	12.74		4.21	4.00		
(3768) Davco Granulated Fertilizer 2-12-6	2.01	2.00	12.40	12.00	*5.29	6.00		
(2962) Dayco Granulated Fertilizer 2-12-6	2.08	5.00	*11.10	12.00	6.03	6.00		
(3255) Davco Granulated Fertilizer 2-12-6	2.01	2.00	12.60	12.00	6.02	6.00		
(3351) Davco Granulated Fertilizer 2-12-6	2.03	2.00	12.10	12.00	6.38	6.00		
(3447) Davco Granulated Fertilizer 2-12-6	*1.79	2.00	11.92	12.00	*5.53	6.00		
(3748) *Deficient	2.01	2.00	12,00					

	NITR	OGEN		LABLE ORIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. et.	P. ct.	P. ct.	P. et.	P. ct.	P. ct.	P. ct.
Davoo Granuleted Fertilizer 2-12-6					×		
(3771) Davco Granulated Fertilizer 3-12-6	1.86	2.00	12.79	12.00	*5.50	6.00	
(2954) Davco Granulated Fertilizer 3-12-6	3.04	3.00	12.48	12.00	6.07	6.00	
(3142) Davco Grenulated Fertilizer 3-12-6	3.05	3.00	12.06	12.00	6.19	6.00	
(3261) Davoo Granulated Fertilizer 3-12-6	2,90	3,00	12.15	12.00	6.04	6.00	
(3352) Davoo Gramulated Fertilizer 3-12-6	2.90	3,00	12.02	12.00	6.17	6.00	
(3448) Devco Granuleted Fertilizer 3-12-6	3,03	3,00	12,69	12.00	*5.42	6.00	
(3563) Dayoo Granulated Fertilizer 3-12-6	3.11	3,00	12.94	12.00	6.02	6,00	
(3749) Davoo Gramulated Fertilizer 4-8-7 (2955)	2.89 4.05	3.00 4.00	12.90 8.18	12.00 8.00	6.33 7.14	6.00 7.00	
Davoo Granulated Fertilizer 4-8-7 (3034) Davoo Granulated Fertilizer 4-8-7 (3140)	4.16 3.97	4.00	8.01 8.06	8.00	7.01 7.05	7.00	
Davoo Granulated Fertilizer 4-8-7 (3257) Davoo Granulated Fertilizer 4-8-7 (3564)	3.81 4.07	4.00	8.71 8.24	8.00	7.02	7.00	
Devco Gramulated Fertilizer 4-8-7 (3711) Devco Granulated Fertilizer 4-12-4	3.81	4.00	8.28	8.00	*6.75	7.00	
(2763)	4.01	4.00	12.50	12.00	4.00	4.00	
Davco Granulated Fertilizer 4-12-4 (2956)	4.04	4.00	12.25	12.00	4.13	4.00	
Davco Granulated Fertilizer 4-12-4 (3354)	3.85	4.00	12.43	12.00	*3.67	4.00	
Davco Granuleted Fertilizer 4-12-4 (3712)	4.23	4.00	12.59	12.00	4.12	4.00	
Davco Granuleted Fertilizer 4-12-4 (3746)	4.23	4.00	12.90	12.00	4.25	4.00	
Davco Granulated Fertilizer 4-16-4 (2957)	4.17	4.00	16.80	16.00	4.17	4.00	
Davco Granuleted Fertilizer 4-16-4 (3141)	4.20	4.00	16.32	16.00	4.21	4.00	
Davco Granuleted Fertilizer 4-16-4 (3256)	*3.76	4.00	16.32	16.00	*3.72	4.00	
Devco Granulated Fertilizer 4-16-4 (3350)	4.20	4.00	16.12	16.00	4.10	4.00	
Davco Granulated Fertilizer 4-16-4 (3750)	4.16	4.00	16.24	16.00	4.27	4.00	
Davco Gremuleted Fertilizer 4-16-4 (3772)	4.30	4.00	16.84	16,00	4.12	4.00	
Davco Granulated Fertilizer 4-16-20 (3769)	3.87	4.00	*15.10	16.00	23.10	20.00	
Davoo Gramulated Fertilizer 5-10-5 (2762)	5.28	5.00	10.03	10.00	5.30	5.00	
Davco Granulated Pomo Food 10-6-4	*9.69	10.00	6.01	6.00	4.00	4.00	
(3258) Davco Gremulated Pomo Food 10-6-4	*9.72	10.00	6.33	6.00	4.35	4.00	
(3355)	0012	10.00	0.00				
EASTERN STATES FARMERS EXCHANGE, Springfield, Mass.	2.30	2.00	8.23	8.00	10.45	10.00	
Eastern Statee 2-8-10 (2806) Eastern States 2-8-10 (3028)	2.31	2.00	9.14 9.45	8.00	11.33 10.86	10.00	
Eastern Statee 2-8-10 (3290) Eastern Statee 2-8-10 (3863)	2.29	2.00	9.03 12.78	8.00 12.00	10.28	10.00	
Eastern States 2-12-6 (3029) Eestern States 2-12-6 (3862)	2.61	2.00	13.58	12.00	6.38 8.49	6.00	
Eastern States 4-8-8 (2805) Eastern States 4-8-8 (3026)	4.04	4.00	8.97	8.00	8.86 8.69	8.00	
Eastern Statee 4-8-8 (3292) Eastern Statee 4-12-4 (3027)	4.27	4.00	8.86 12.82	8.00 12.00	4.58	4.00	
Eastern Statee 4-12-4 (3859) Eastern Statee 4-16-20 (3025)	4.20 4.29	4.00	13.16 16.28	12.00	4.84	20.00	
Eastern States 4-16-20 (3278) Eastern States 4-16-20 (3294)	4.50 4.20	4.00	16.24 16.20	16.00	22.32 20.39	20.00	
Eastern States 4-24-12 (2804) Eastern States 4-24-12 (3031)	4.29	4.00	*23.60 24.22	24.00 24.00	14.16 12.17	12.00	
Eastern Statee 4-24-12 (3295) Eastern Statee 8-16-16 (3033)	4.31 ≱7.77	4.00 8.00	24.24 16.14	24.00 16.00	14.99 16.46	12.00 16.00	
Eastern States 8-16-16 (3273) Eastern States 8-16-16 (3289)	7.87 *7.47	8.00	16.56 16.20	16.00 16.00	16.93 17.32	16.00 16.00	
Eastern States 8-16-16 (3858) Eastern States 8-24-8 (3024)	7.86 8.01	8.00	17.04 24.08	16.00 24.00	15.88 8.01	16.00 8.00	
Eastern States 8-24-8 (3275) Eestern States 8-24-8 (3277)	8.16 8.18	8.00	24.20 24.20	24.00 24.00	7.89 8.32	8.00	
Eastern States 8-24-8 (3861)	8.35 *11.74	8.00	24.80 4.34	24.00 4.00	8.19 4.12	8.00 4.00	
Eastern States 12-4-4 (3293) Eastern States 12-4-4 (3860)	12.34	12.00	5.38	4.00	4.09 13.73	4.00	
Eastern States 12-16-12 (3030) Eastern States 12-16-12 (3291)	11.97 12.53	12.00	16.24	16.00	13.94	12.00	
ERIE REDUCTION COMPANY, Erie, Pe.	E 35	5.00	10.35	10.00	5.46	5.00	
Big Crop Special 5-10-5 (2935) Erie Corn and Wheat Special 2-12-6	5.15	5.00	10.35		6.36	6.00	
(2936) Erie Plant Food 4-12-4 (2933)	2.18 4.03	2.00 4.00	12.02 *11.76	12.00	4.05 *9.76	4.00	
Erie Poteto Special 2-8-10 (2932) Erie Truck Special 4-8-7 (2931)	2.22 #3.79	2.00	8.66	8.00	7.12	7.00	
General Crop Special 2-12-2 (2934)	2,31	2.00	12.37	12.00	2.47	2.00	
GIPE FERTILIZER WORKS, Lebanon, Pa.				0.55	*0.20	10.00	
Gipe's 2-8-10 (3433) Gipe's 2-9-5 (3434)	2.01	2.00	9.01	9.00	*8.18 5.54	10.00	
Gipe'e 2-12-4 (3436) Gipe's 2-12-6 (3435)	2.04	2.00	12.02 12.89	12.00	3.82 *5.48	4.00 6.00	
Gipe'e 3-12-6 (3432)	*2.78	3.00	13.09	12.00	5.94	6.00	
*Deficient							

	NITEC	GEN	AVAIL PHOSPHO	ABLE RIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. et.	P. ct.	P. et.	P. et.	P. ct.
GRIFFITH & BOYD CO., Baltimore, Md. Extra Strength Guano 4-16-4 (3342) Fish and Potash Guano 2-10-4 (3094) Fish and Potash Guano 2-10-4 (3499) Gilt Edge Crop Guano 2-8-10 (3343) Gilt Edge Crop Guano 2-8-10 (3739) High Grade Fish and Potash Mixture	4.12 2.00 2.05 2.01 2.08 2.01	4.00 2.00 2.00 2.00 2.00 2.00 2.00	16.04 10.29 10.78 8.22 8.22 8.30	16.00 10.00 10.00 8.00 8.00 8.00	4.59 4.17 4.10 9.94 10.11 10.66	4.00 4.00 4.00 10.00 10.00	
2-12-8 (3566) High Grade Truck Guano 4-8-7 (3092) High Grade Truck Guano 4-8-7 (3500) Peerless Fortilizer 1-10-5 (3076) Peerless Fertilizer 1-10-5 (3093) Peerless Fertilizer 1-10-5 (3422) Peerless Fertilizer 1-10-6 (3496) Peerless Fertilizer 1-10-6 (3496) Peerless Fertilizer 1-10-5 (3734) Planters Frido 3-12-6 (3075) Planters Prido 3-12-6 (3075) Planters Prido 3-12-6 (3756) Reliable Crop Grower 2-12-4 (3074) Reliable Crop Grower 2-12-4 (3074) Reliable Crop Grower 2-12-4 (3465) Reliable Crop Grower 2-12-4 (3736) Reliable Crop Grower 2-12-4 (3736) Special Fish Guano 3-12-6 (3732) Special Guano 2-9-5 (3072) Special Guano 2-9-5 (3360) Special Guano 2-9-5 (3735) Truckers Special 4-8-5 (3466) Wheat and Grain Special 2-12-6 (3424) Wheat and Grain Special 2-12-6 (3464)	2.17 3.92 4.05 1.01 1.01 1.01 1.06 3.10 3.09 3.29 2.15 2.03 2.08 2.08 2.08 2.13 3.23 1.92 2.01 *1.75 4.00 2.00	2.00 4.00 1.00 1.00 1.00 1.00 3.00 3.00 3.00 2.00 2.00 2.00 2.00 2	12.92 8.26 8.62 10.41 10.77 10.70 10.68 10.70 12.86 13.13 12.57 12.63 12.79 12.92 12.12 12.61 12.58 9.17 9.55 9.81 8.64 12.41 12.55	12.00 8.00 10.00 10.00 10.00 10.00 12.00	8.96 7.18 5.00 5.18 4.86 4.84 5.29 *5.71 *5.46 6.32 *5.71 *5.46 6.32 *5.71 6.18 6.12 6.19	8.00 7.00 5.00 5.00 5.00 5.00 5.00 6.00 6.00 4.00 4.00 4.00 4.00 4.00 6.00 5.00 6.00 6.00 6.00 6.00 6.00 6	
INDEPENDENT MANUFACTURING CO., Philadelphia, Pa. Independent's Consumer 2-8-10 (3332) Independent's Consumer 2-8-10 (3525) Independent's Consumer 2-9-5 (3329) Independent's Coneumer 2-9-5 (3527) Independent's Coneumer 2-12-4 (3675) Independent's Consumer 3-12-6 (3333) Independent's Consumer 3-12-6 (3516) Independent's Consumer 4-8-7 (3534) Independent's Consumer 4-8-7 (3512) Independent's Consumer 4-8-7 (3330) Independent's Consumer 5-8-7 (3330) Independent's Consumer 5-8-7 (3515) Independent's Special Wheat Fertilizer	2.29 2.09 2.23 2.10 1.85 3.19 3.31 4.01 4.00 4.30 5.18 6.13	2.00 2.00 2.00 2.00 2.00 3.00 3.00 4.00 4.00 5.00 5.00	*7.66 8.10 9.08 9.01 12.44 12.63 12.24 8.72 8.06 8.42 8.85 8.10	8.00 8.00 8.00	10.42 10.73 4.91 5.10 4.00 6.31 6.10 7.53 7.29 10.99 7.06 86.67	10.00 10.00 5.00 5.00 4.00 6.00 7.00 7.00 10.00 7.00	
(3327) Independent's Standard 3-10-10 (3517) Independent's Standard 5-8-7 (3328) Independent's Standard 5-8-7 (3526) Independent's Standard 6-8-5 (3331) Independent's Standard 6-8-5 (3513)	2.27 3.25 5.28 5.22 5.86 *5.78	2.00 3.00 5.00 5.00 6.00 6.00	12.16 10.92 8.43 8.16 9.50 8.44	12.00 10.00 8.00 8.00 8.00 8.00	5.11 10.15 7.20 7.21 6.62 5.52	5.00 10.00 7.00 7.00 5.00 5.00	
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N. Y. International Early Harvest 3-12-6 (2940) International Economy 4-16-4 (2946) International Empire 5-10-5 (2947) International Garden Truck 4-8-7 (2944) International General Crop 2-12-4 (2948) International Ideal 2-9-5 (2939) International Premium Tomato 3-12-6	2,01	3.00 4.00 5.00 4.00 2.00 2.00	13.08 16.44 10.22 8.73 12.59 9.69	12.00 16.00 10.00 8.00 12.00 9.00	6.21 4.01 5.19 6.88 4.13 4.92 *5.25	6.00 4.00 5.00 7.00 4.00 5.00	
(2950) International Supreme 2-8-10 (2943) International 4-8-12 Fertilizer (2949) International 5-8-8 Fertilizer (2945) International 7-6-6 Fertilizer (2951)	3.17 2.06 4.06 4.89 *6.42	3.00 2.00 4.00 5.00 7.00	13.54 8.32 8.35 7.94 6.38	8.00 8.00 8.00 6.00	10.17 13.88 7.82 6.01	10.00 12.00 8.00 6.00	
KOLLER FERTILIZER COMPANY, York, Pa.	*3.66	4.00	15.07	10.00	5.59	4.00	
Hooker's Formula 4-10-4 (3810) Koller's Ammoniated Phosphate 1-10-5	1.07	1.00	10.76	10.00	5.55	5.00	
(3809) Koller's Ammoniated Phosphate 1-10-5	1.09	1.00	10,23	10,00	5.50	5.00	
(3857) Koller's Corn Special Phosphate 2-12-4	2.05	2.00	12.13	12.00	4.09	4.00	
(3207) Koller's Corn Special Phosphate 2-12-4	2,09	2.00	13,24	12.00	4.04	4.00	
(3808) Koller's Corn Special Phosphate 2-12-1	2,03	2.00	12.46	12,00	4.46	4.00	
(3849) Koller's Keystone Potato Fertilizer	4.08	4.00	9.70	8,00	*6.79	7.00	
4-8-7 (3208) Koller's Keystone Potato Fertilizer	4.30	4.00	8.94	8.00	*6.69	7.00	
4-8-7 (3856) Koller's Lion Brand Phosphate 2-10-6	2.14	2.00	10.96	10.00	6.78	6.00	
(3209) Koller's Lion Brand Phosphate 2-10-6	2.19	2.00	11.36	10.00	6.75	6.00	
(3807) Koller's Lion Brand Phosphate 2-10-6	2.06	2.00	10.35	10.00	7.13	6.00	
(3855) Koller's Potato Grower Phosphate 1-8-8	1.01	1.00	10.79	8.00	* 7.26	8.00	
(3212) Koller's Potato Grower Phosphate 1-8-8	1.07	1.00	10.95	8.00	*7.36	8.00	
(3850) Koller's Producer Phosphate 2-8-10	1.89	2.00	9,61	8.00	11.48	10.00	
(3211) Koller's Producor Phosphate 2-8-10	2.01	2.00	9.51	8.00	11.15	10.00	
(3804) Koller's Producer Phosphate 2-8-10	*1.52	2.00	8,98	8.00	10.20	10.00	
(3851) *Deficient	1.02	2.00					

MANUFACTURER AND BRAND NAME	NITR	OGEN		LABLE ORIC ACID		POTASH	
MANOTACI CREMAND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. et.	P. ct.	P. et.
Kollar's Super Ammoniated Phosphate 2-9-5 (3210)	1.82	2.00	9.70	9.00	4.82	6.00	
Koller's Supar Ammoniated Phosphate 2-9-5 (3806)	*1.78	2.00	9.95				
Koller's Supar Ammoniated Phosphate				9.00	5.86	5.00	
2-9-5 (3854) Koller's Truck and Garden Phosphate	1.81 *2.77	2.00	9.82	9.00	4.84	5.00	
3-8-5 (3213)		3,00	8.29	8.00	*4.54	5.00	
LANCASTER SONE FERTILIZER CO., INC., Quarryvilla, Pa.							
Conestoga 2-8-10 (3222) Conestoga 2-8-10 (3881)	2.08	2.00	8.54	8.00	*9.47 10.22	10.00	
Coneetoga 2-10-8 (3221) Coneatoga 3-12-5 (3224)	2.26 2.86	2.00	10.42 *11.28	10.00	9.07 5.02	8.00 5.00	
Conestoga 3-12-5 (3877) Conestoga 4-10-8 (3219)	2.84 3.88	3.00	12.56 10.41	12.00	5.10 7.87	5.00 8.00	
Conestoge Fish Compound 2-10-5 (3218)	2.02	2.00	10.20	10.00	5.35	5.00	
Coneetoga Fish Compound 2-10-5 (3883) Coneetoga Rarveet Queen 2-9-5 (3217)	3.03 1.86	2.00	9.20	9.00	5.00	5.00	
Conestoga Harvest Queen 2-9-5 (3880) Coneetoga Lancastar Peerlass 2-12-4	2.02	2.00	9.56	9.00	5.04	5.00	
(3220) Coneetoga Lancaeter Pearless 2-12-4	2.06	2.00	12.54	12.00	4.00	4.00	
(3882) Conestoga Tobacco Mixture (3305)	2.03 3.22	2.00 3.00	12.56 8.56	12.00	4.10 *11.30	4.00 12.00	
Conestoga Tobacco Special (3304) Conestoga Tomato Special (3215)	3.91 *3.62	4.00	7.84 12.12	8.00 12.00	7.95 *5.57	8.00 6.00	
onestoga Truckers Special (3223)	*3.78	4.00	9.17	8.00	7.34	7.00	
LEBANON FERTILIZER WORKS,							
Lebanon, Pa. Levan's 1-10-5 (3684)	1.01	1.00	10.10	10.00	5.34	5.00	
evan's 2-8-10 (3673) Levan'e 2-9-5 (3683)	1.94 1.96	2.00	8.20 9.16	8.00 9.00	*9.63 4.87	10.00 5.00	
evan'e 2-12-4 (3675) evan's 2-12-6 (3449)	2.03	2.00	12.06 12.13	12.00	4.33 6.08	4.00 6.00	
evan's 2-12-6 (3676) evan'e 3-12-6 (3450)	2.10	2.00	12.24	12.00	6.25 6.16	6.00	
evan's 3-12-6 (3677)	3.03	3.00	12.89	12.00	6.07	6.00	
evan'e 4-8-7 (2744) evan'e 4-8-7 (3674)	3.89 4.09	4.00	8.32	8.00	6.88 *6.65	7.00	
evan's 4-16-4 (3682) evan'e 4-16-10 (2743)	4.15 4.22	4.00	16.16 16.06	16.00	4.51 10.36	10.00	
evan'e 4-16-10 (3681)	4.22	4.00	*15.75	16.00	10.58	10.00	
FRED E. LORD, INC., Espy, Pa. ord'e 2-8-10 (3360)	2.08	2.00	8.04	8.00	10.07	10.00	
ord's 2-12-4 (3363) ord's 4-8-8 (3364)	2.01 4.29	2.00 4.00	12.46 8.48	12.00	4.54 8.13	4.00 8.00	
ord's 5-10-5 (3361)	5.13	5.00	10.26	10.00	5.75	5.00	
MILLER CHEMICAL & FERTILIZER CORP.,							
Baltimore, Md. Banad 2-12-6 (3442)	2.06	2.00	12.56	12.00	6.29 *4.77	6.00 5.00	
arvest Quean 2-9-5 (3441) lch Yield Farmers Profit 2-12-4 (3053)	1.88	2.00	9.96 *11.35	12.00	4.27	4.00	
ich Yield Farmars Profit 2-12-4 (3460) ich Yield Potato and Vegetable 4-8-8	2.02	2.00	12.71	12.00	4.05	4.00	
(2976) Ich Yield Potato and Vegatable 4-8-8	3.86	4.00	8.14	8,00	8.39	8.00	
(3052) Ich Yield 2-8-10 (2977)	*3.61 2.01	4.00 2.00	8.03 13.68	8.00	9.07 *6.56	8.00 10.00	
ich Yield 2-8-10 (3443)	1.92	2.00	8.76	8.00	9.90	10.00	
lch Yield 2-12-6 (3440) lch Yield 3-12-6 (3054)	2.03	2.00	12.88	12.00	6.16	6.00	
ich Yield 3-12-6 (3439) ich Yiald 4-8-7 (2975)	2.96 *3.51	3.00 4.00	12.41 8.16	12.00 8.00	6.06 6.97	6.00 7.00	
ich Yield 5-10-5 (2978)	*4.71	5.00	10.52	10.00	5.81	5.00	
PENNSYLVANIA FARM SUREAU COOP.							
ASSOC., INC., Rarrisburg, Pa. arm Sureau 2-8-10 (3428)	2.17	2.00	8.11 10.20	8.00 9.00	10.54 4.85	10.00	
arm Sureau 2-9-5 (3131) arm Sureau 2-9-5 (3427)	2.0€	2.00	9.07	9.00	5.18	5.00	
arm Bureau 2-12-6 (3132) arm Bureau 4-8-8 (3134)	2.12 3.81	2.00 4.00	12.12 8.76	12.00 8.00	6.09 8.13	6.00 8.00	
arm Sureau 4-10-6 (3133)	4.03	4.00	11.01	10.00	6.29	6.00	
RASIN MONUMENTAL COMPANY, Baltimore, Md.							
asin's Comet Grain and Grass Grower 2-12-4 (2742)	2.02	2.00	12,42	12.00	4.14	4.00	
aein's Comet Grain and Grass Grower 2-12-4 (3112)	2.20	2.00	12.50	12.00	4.18	4.00	
asin's Comet Grain and Grass Grower	2.21	2.00	12.49	12.00	4.12	4.00	
2-12-4 (3452) sein's Righ Orade Truck Compound				8.00	7.38	7.00	
4-8-7 (2740) aein's High Grade Truck Compound	3.91	4.00	8.52			i	
4-8-7 (3114) asin's Royal Fish and Potash Mixture	3.89	4.00	8,84	8.00	7.22	7.00	
2-9-5 (2739) aein's Royal Fish and Potash Mixture	2.02	2.00	9.32	9.00	5.33	5.00	
2-9-5 (3451) asin's Royal Fieh and Potash Mixture	2.05	2.00	9,28	9.00	5.36	5.00	
2-9-5 (3723)	2.06	2,00	9.47	9.00	5.23	5.00	
Lasin's Special for Potatoas and Vegetables 2-8-10 (2741)	2.01	2.00	8.48	8.00	10.21	10.00	
Raein's Special for Potatoes and Vegetablas 2-8-10 (3453)	2.05	2.00	8.86	8.00	10.16	10.00	
Deficient							

TABLE III. ANALYSES OF COMPLETE FEI	NITRO		AVAII	LABLE ORIC ACID		POTASH	
MANUFACTURER AND BRAND NAME -	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
READING BONE FERTILIZER COMPANY, Reading, Pa. Reading All Crop Special 2-10-6 (3001) Reading All Crop Special 2-10-6 (3376) Reading 2-8-10 (3302) Reading 2-9-5 (3803) Reading 2-9-5 (3003) Reading 2-9-5 (3003) Reading 2-9-5 (3381) Reading 2-12-4 (2834) Reading 2-12-4 (3000) Reading 2-12-4 (3576) Reading 3-12-6 (2999) Reading 4-8-7 (2995) Reading 4-8-7 (2996) Reading 4-8-7 (2996) Reading 5-10-5 (2996)	P. ct. 2.02 1.84 2.21 2.17 2.03 2.04 2.12 2.06 2.10 2.24 3.17 4.92	P. ct. 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2	P. ct. 10.04 10.90 8.10 8.95 *8.80 9.25 9.67 12.88 12.12 12.51 12.07 8.53 16.88 10.06	P. ct. 10.00 10.00 8.00 8.00 9.00 9.00 9.00 12.00 12.00 12.00 12.00 8.00 8.00 16.00 10.00	P. ct. 6 .01 6 .58 *8.28 10.00 6 .39 6 .85 5 .49 4 .54 4 .16 6 .25 6 .67 7 .41 4 .01 5 .18	P. ct. 6.00 6.00 10.00 10.00 5.00 6.00 5.00 4.00 4.00 7.00 7.00 7.00 5.00	P. ct.
ROBERT A. REICHARD, INC., Allentown, Pa. Animal Base 2-8-10 (2989) Animal Base 2-9-5 (2988) Animal Base 3-12-6 (2986) Animal Base 4-8-8 (2987) Animal Base 4-8-8 (2987) Animal Base 5-8-7 (2990)	2.02 2.00 3.01 4.17 5.01	2.00 2.00 3.00 4.00 5.00	8.63 9.43 12.10 8.25 8.43	8.00 9.00 12.00 8.00 8.00	9.96 4.88 6.00 8.04 6.98	10.00 5.00 6.00 8.00 7.00	
F. S. ROYSTER GUANO COMPANY, Baltimore, Md. Royster Banner Guano 2-8-10 (2774) Royster Banner Guano 2-8-10 (2798) Royster Banner Guano 2-8-10 (2971) Royster Banner Guano 2-8-10 (3153) Royster Banner Guano 2-8-10 (3153) Royster Banner Guano 2-8-10 (3404) Royster Banner Guano 2-8-10 (3419) Royster Banner Guano 2-8-10 (3521) Royster Banner Guano 2-8-10 (3521) Royster Big Bully Guano 2-9-5 (2777) Royster Big Bully Guano 2-9-5 (2777) Royster Big Bully Guano 2-9-5 (2907) Royster Big Bully Guano 2-9-5 (3084) Royster Big Bully Guano 2-9-5 (3147) Royster Big Bully Guano 2-9-5 (3697) Royster Big Bully Guano 2-9-5 (3697) Royster Curlew Guano 3-12-6 (2795) Royster Curlew Guano 3-12-6 (3149) Royster Curlew Guano 3-12-6 (3149) Royster Curlew Guano 3-12-6 (3406) Royster Curlew Guano 3-12-6 (3406) Royster Dependable Truck Guano 5-10-5	2.01 2.11 2.12 1.97 2.01 1.93 1.90 2.04 2.12 2.02 2.03 2.06 2.06 3.01 3.01 3.08 3.08	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	8.42 9.16 8.70 8.94 8.58 8.14 8.37 8.72 9.64 9.48 9.59 9.04 10.25 12.33 12.00 12.86 12.54	8.00 8.00 8.00 8.00 8.00 8.00 8.00 9.00 9	10.39 9.84 *9.59 10.68 10.43 10.00 10.10 9.83 5.20 4.84 5.20 4.84 6.04 6.04 6.14 6.17	10.00 10.00 10.00 10.00 10.00 10.00 10.00 10.00 5.00 6.00 5.00 6.00 6.00 6.00 6.00	
Royster Dependable Truck Guano 5-10-5 (2771) Royster Dependable Truck Guano 5-10-5 (2771) Royster Dependable Truck Guano 5-10-5 (2974) Royster Gem Grain Guano 2-12-4 (2772) Royster Gem Grain Guano 2-12-4 (2970) Royster Gem Grain Guano 2-12-4 (2970) Royster Gem Grain Guano 2-12-4 (3087) Royster Gem Grain Guano 2-12-4 (3087) Royster Gem Grain Guano 2-12-4 (3616) Royster Gem Grain Guano 2-12-4 (3616) Royster Gem Grain Guano 2-12-4 (3616) Royster Hercules Guano 4-16-4 (3636) Royster Hercules Guano 4-16-4 (3695) Royster Master Grain Guano 2-12-6 (2908) Royster Master Grain Guano 2-12-6 (2908) Royster Master Grain Guano 2-12-6 (3088) Royster Master Grain Guano 2-12-6 (3088) Royster Master Grain Guano 2-12-6 (3404) Royster Master Grain Guano 2-12-6 (3404) Royster Quality Trucker 4-8-7 (2776) Royster Quality Trucker 4-8-7 (2975) Royster Quality Trucker 4-8-7 (3085) Royster Quality Trucker 4-8-7 (3085) Royster Quality Trucker 4-8-7 (3122) Royster Quality Trucker 4-8-7 (3122) Royster Quality Trucker 4-8-7 (3123) Royster Trojan Guano 4-12-4 (3346) Royster Trojan Guano 4-12-4 (3348) Royster Trojan Guano 4-12-4 (3348) Royster Trojan Guano 4-12-4 (3484)	4.84 5.01 2.28 2.00 2.03 2.06 2.03 2.16 2.00 4.21 4.27 2.04 2.03 3.10 3.04 2.00 2.11 2.01 3.87 4.07 4.07 4.02 4.06 4.15 4.16 4.06 4.13 4.17	5.00 5.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00 4.00	10.41 10.49 20.38 12.70 12.99 12.29 12.67 12.02 12.63 12.63 12.24 12.24 12.24 12.26 12.41 12.26 8.60 8.37 8.66 8.32 8.56 12.11 12.04 12.04 12.94	10.00 10.00 20.00 12.00	6.20 5.34 4.41 4.02 3.88 4.01 4.00 4.11 4.12 4.36 6.19 6.23 6.16 5.97 6.38 7.06 7.10 7.28 7.16 7.26 4.46 4.13 4.02 4.05 4.08	6.00 6.00 4.00 4.00 4.00 4.00 4.00 4.00	
M. L. SROEMAKER & CO., INC., Philadelphia, Pennsylvania Shoemaker's Swift Sure 1-10-6 (3639) Shoemaker's Swift Sure 2-8-10 (3627) Shoemaker's Swift Sure 2-9-5 (3307) Shoemaker's Swift Sure 2-9-5 (3629) Shoemaker's Swift Sure 2-12-4 (3626) Shoemaker's Swift Sure 3-10-6 (3308) Shoemaker's Swift Sure 3-10-6 (3536) Shoemaker's Swift Sure 3-12-6 (3636) Shoemaker's Swift Sure 3-12-6 (3636) Shoemaker's Swift Sure 4-8-7 (3628) Shoemaker's Swift Sure 4-8-7 (3628) Shoemaker's Swift Sure 5-8-5 (3637) Shoemaker's Swift Sure 5-8-7 (3638)	1.07 2.19 2.09 2.23 2.00 3.11 3.01 3.02 4.01 4.07 5.08 5.13	1.00 2.00 2.00 2.00 2.00 3.00 3.00 4.00 4.00 5.00	10.37 8.00 9.81 9.60 12.88 10.26 10.96 8.11 8.15 8.56 8.49	10.00 8.00 9.00 9.00 12.00 10.00 10.00 12.00 8.00 8.00 8.00 8.00	5.00 10.23 5.01 *4.64 4.24 6.10 6.31 6.89 7.04 7.10 5.70 6.81	5.00 10.00 5.00 6.00 4.00 6.00 6.00 7.00 7.00 5.00 7.00	
THE SMITR AGRICULTURAL CHEMICAL CO. Columbus, Ohio Sacco 2-12-2 (3345) Sacco 2-12-6 (3600) Sacco 4-8-7 (3347)	2.10 2.21 3.90	2.00 2.00 4.00	*11.76 12.09 8.06	12.00 12.00 8.00	2.05 6.37 7.38	2.00 6.00 7.00	
*Deficient							

	NITR	OGEN		LABLE ORIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Guar.	As Muriate
SUMMERS FERTILIZER CO., INC., Saltimore, Md.	P. ct.	P. et.	P. et.	P. ct.	P. et.	P. ct.	P. ct.
2-12-6 Fertilizer (3714) SWACK FERTILIZER CO., DuBois, Pa. SWack's 2-8-10 (2789) Swack's 2-9-5 (2791) Swack's 2-9-6 (3016) Swack's 2-9-5 (3728) Swack's 2-9-5 (3754) Swack's 2-9-5 (3754) Swack's 2-12-4 (2765) Swack's 2-12-4 (2765) Swack's 2-12-4 (3790) Swack's 2-12-4 (3790) Swack's 2-12-4 (3790) Swack's 3-12-6 (3606) Swack's 3-12-6 (3020) Swack's 3-12-6 (3605) Swack's 3-12-6 (3605) Swack's 4-8-7 (2763) Swack's 4-8-7 (2763) Swack's 4-8-7 (3753) Swack's 4-12-4 (3756) Swack's 4-12-4 (3753)	2.06 2.06 1.89 1.81 2.08 2.23 2.04 2.07 2.03 2.01 2.05 2.13 3.06 2.94 *2.69 *3.72 *3.86 3.85 3.85 3.86 *4.29 *4.64	2.00 2.00 2.00 2.00 2.00	12.46 12.47	12.00 8.00 9.00 9.00 9.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00	4.14	6.00 10.00 6.00 5.00 5.00 2.00 4.00 4.00 4.00 6.00 6.00 6.00 7.00 7.00 7.00 4.00 4.00 4.00 4.00 5.00	
Smift's Red Steer 4-8-8 (3645) Swift's Red Steer 4-12-4 (3530) Smift's Red Steer 4-12-4 (3648) Swift's Red Steer 4-16-4 (2978) Swift's Red Steer 4-16-4 (2979) Swift's Red Steer 4-16-4 (3788) Swift's Red Steer 4-16-4 (3788) Swift's Red Steer 5-10-5 (3629)	2.03 1.88 1.95 *1.63 2.01 1.83 1.90 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00		8.00 8.00 9.00 9.00 9.00 9.00 12.00	*9.60 *9.61 *9.06 5.04 *4.57 6.13 *4.45 2.40 4.52 4.04 *5.71 *5.21 *6.06 6.12 7.30 6.46 6.23 6.96 7.11 6.92 *7.77 4.23	10.00 10.00 10.00 5.00 5.00 5.00 5.00 2.00 4.00 6.00 6.00 6.00 6.00 6.00 6.00 6	
TRENTON BONE FERTILIZER CO., Trenton, N. J. Trenton 5-10-6 (3326)	6.02	5,00	9.95	10.00	5.27	5,00	
F. W. TUNNELL & CO., INC., Philadelphia, Fa. Tunnell's 1-10-5 (3520) Tunnell's 2-8-10 (2736) Tunnell's 2-8-10 (3512) Tunnell's 2-8-10 (3507) Tunnell's 2-9-6 (3313) Tunnell's 2-9-5 (3508) Tunnell's 2-9-6 (3313) Tunnell's 2-10-6 Fish Brand (3518) Tunnell's 2-12-4 (3511) Tunnell's 2-12-4 (3511) Tunnell's 2-12-4 (3511) Tunnell's 2-12-6 (3521) Tunnell's 3-12-6 (3523) Tunnell's 3-12-6 (2733) Tunnell's 3-12-6 (2909) Tunnell's 3-12-6 (2909) Tunnell's 4-8-7 (2911) Tunnell's 4-8-7 (2911) Tunnell's 4-8-10 (3510) Tunnell's 4-8-7 (3314) Tunnell's 4-8-7 (3315) Tunnell's 5-8-7 (3315) Tunnell's 5-8-7 (3315) Tunnell's 5-8-7 (2736)	1.38 2.12 2.11 2.20 2.20 2.21 2.14 2.23 2.27 2.37 2.37 2.37 2.37 3.08 3.01 3.08 3.21 4.24 4.14 4.06 3.90 5.09 5.02	1.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	10.94 9.02 8.66 8.52 9.82 9.75 11.20 12.68 11.93 12.18 12.23 8.53 11.94 12.32 12.04 8.95 8.64 8.30 8.11	10.00 8.00 8.00 8.00 9.00 9.00 12.00 12.00 12.00 12.00 8.00 12.00 8.00 8.00 8.00 8.00	5.40 10.54 9.85 10.24 5.38 5.73 6.81 4.37 4.437 4.437 4.437 4.678 9.86 6.94 6.60 6.60 6.25 7.12 6.93 10.15 7.12	5.00 10.00 10.00 10.00 5.00 5.00 6.00 4.00 4.00 4.00 6.00 6.00 6.00 7.00 7.00 7.00 7.00	
VIRGINIA-CAROLINA GHEMICAL CORP. Baltimore, Md. V-C 1-10-6 Fertilizer (2751) V-C 1-10-5 Fertilizer (3752) V-C 1-10-5 Fertilizer (3722) V-C 2-8-10 Fertilizer (2764) V-C 2-8-10 Fertilizer (3668) V-C 2-8-10 Fertilizer (3668) V-C 2-8-10 Fertilizer (3667) V-C 2-9-5 Fertilizer (3665) V-C 2-9-5 Fertilizer (3665) V-C 2-9-5 Fertilizer (3666)	1.28 1.31 1.19 2.07 2.01 2.03 1.81 2.16 1.86 2.05	1.00 1.00 1.00 2.00 2.00 2.00 2.00 2.00	10,44 10,49 10,71 8,89 8,76 8,49 8,72 8,92 10,74 9,80	10,00 10,00 10,00 8,00 8,00 8,00 8,00 9,00 9,00 9,00	6.07 5.22 5.25 10.19 10.63 10.41 10.76 5.22 *4.69 5.34	5.00 5.00 5.00 10.00 10.00 10.00 5.00 6.00	

NITRO	OGEN				POTASH	
Found	Cuar.	Found	Guar.	Found	Guar.	As Muriate
P.ct. 2.23 2.17 2.28 2.23 2.115 3.10 3.15 3.00 3.97 4.05 4.05 4.01 4.05 4.01 2.01 2.02 2.02 2.01	P. ct. 2.00 2.00 2.00 2.00 2.00 3.00 3.00 3.	P. ct. 12.25 12.26 12.26 12.74 12.95 12.40 12.04 12.05 11.97 12.28 12.23 12.40 8.36 8.66 9.00 12.22 16.60 12.22 16.10 16.62 17.44 10.24 9.37 9.43 9.03 9.45	P. ct. 12.00 8.00 8.00 12.00 16.00 16.00 16.00 16.00 19.00 9.00 9.00 9.00 9.00 9.00	P. ct. 4.54 4.25 4.25 4.20 6.30 6.12 6.25 6.45 6.10 7.04 8.34 3.95 4.39 4.58 5.19 5.06 5.23 5.30	P. ct. 4.00 4.00 4.00 4.00 6.00 6.00 6.00 6.	P. ct.
2.01 2.01 2.26 2.23 2.14 2.05 2.27 3.84 2.27 3.85 4.24 4.23 4.23 4.23 5.35 5.23 2.16 2.13 8.69 5.16 2.18 6.26	2.00 2.00 2.00 2.00 2.00 2.00 2.00 4.00 4	8.04 8.20 12.11 12.12 12.26 12.14 111.97 8.24 10.13 8.43 12.10 13.08 16.12 17.10 10.38 10.20 12.55 12.06 12.10 12.55 12.06 12.10 12.39 12.06 12.10 12.39 12.06 6.22	8.00 8.00 12.00 12.00 12.00 12.00 12.00 12.00 8.00 8.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 12.00 6.00 6.00 6.00	10.62 10.35 4.72 4.32 5.55 6.50 6.38 7.00 12.99 4.23 4.30 4.25 5.05 5.01 6.41 2.37 14.05 7.58 5.26 5.26 5.40 5.92	10.00 10.00 4.00 4.00 4.00 6.00 6.00 10.00 12.00 4.00 4.00 5.00 6.00 6.00 6.00 6.00 6.00 7.00 14.00 7.00 5.00 5.00 5.00 5.00	
2.61 2.29 2.68 2.53 2.75 2.64 2.69 2.53 3.42 3.42 3.42 4.29 6.73	2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00	8.30 9.00 9.64 9.63 12.26 14.27 12.62 13.91 12.53 14.49 9.35 13.12 7.01	8.00 8.00 9.00 9.00 12.00 12.00 12.00 12.00 12.00 12.00 6.00	10.82 11.96 6.01 6.02 4.61 4.88 7.01 6.24 6.76 5.98 8.47 4.51 5.09	10.00 10.00 5.00 5.00 4.00 4.00 6.00 6.00 6.00 7.00 4.00 5.00	
	Found P. ct. 2.25 2.17 2.18 2.17 2.28 2.217 2.15 3.00 3.01 2.015 3.00 3.01 4.05 4.05 4.05 4.01 *4.54 2.05 2.02 2.01 *4.54 2.05 2.02 2.01 2.01 2.26 3.27 4.03 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.02 2.14 2.05 2.06 2.06 2.06 2.06 2.66 2.68 2.66 2.68 2.68 2.68 2.68 2.6	P. ct. P. ct. 2.23 2.00 2.17 2.00 2.28 2.00 2.217 2.00 3.20 3.00 3.16 3.00 3.25 3.00 3.00 3.00 3.91 4.00 4.02 4.00 4.01 4.00 4.05 4.00 3.97 4.00 4.01 4.00 2.01 2.00 2.05 2.00 2.01 2.00 2.01 2.00 2.01 2.00 2.01 2.00 2.01 2.00 2.02 2.00 2.01 2.00 2.01 2.00 2.02 2.00 2.01 2.00 2.14 2.00 2.15 2.00 2.14 4.00 4.07 4.00 4.13 4.00 4.23 4.00 4.24 4.00 4.23 4.00 4.24 4.00 4.25 5.00 3.01 3.00 3.23 3.00	Found	Found Cuar. Found Guar. P. ct. P. ct. P. ct. P. ct. P. ct. 2.25 2.00 12.26 12.00 2.17 2.00 12.26 12.00 2.28 2.00 12.74 12.00 2.25 2.00 12.95 12.00 3.20 3.00 12.04 12.00 3.15 2.00 12.04 12.00 3.16 3.00 11.97 12.00 3.05 3.00 3.00 12.28 12.00 3.26 3.00 12.28 12.00 3.27 3.00 3.00 12.28 12.00 3.91 4.00 8.58 8.00 4.02 4.00 8.16 8.00 3.97 4.00 8.66 8.00 4.01 4.00 9.00 8.00 4.05 4.00 16.62 16.00 4.05 4.00 16.62 16.00 4.05 4.00 16.62 16.00 4.05 4.00 17.44 16.00 4.05 4.00 16.62 16.00 4.01 4.00 9.09 9.09 9.00 2.02 2.00 9.43 9.00 2.04 2.01 2.00 9.49 9.00 2.02 2.00 9.49 9.00 2.02 2.00 9.45 9.00 2.01 2.00 8.20 8.00 2.01 2.00 8.20 8.00 2.01 2.00 8.20 8.00 2.01 2.00 12.11 12.00 2.25 2.00 12.14 12.00 2.26 2.00 12.14 12.00 2.27 2.00 12.14 12.00 2.385 4.00 10.13 8.00 4.24 4.00 8.24 8.00 2.25 2.00 12.14 12.00 2.26 2.00 12.14 12.00 2.27 2.00 11.97 12.00 3.85 4.00 10.13 8.00 4.24 4.00 8.24 8.00 2.25 2.00 12.14 12.00 2.26 2.00 12.14 12.00 2.27 2.00 11.97 12.00 3.85 4.00 10.13 8.00 4.24 4.00 8.43 8.00 4.27 2.00 12.16 12.10 12.00 3.23 3.00 12.26 12.00 12.39 12.00 3.23 3.00 12.26 12.00 10.00 3.23 3.00 12.26 12.00 10.00 3.23 3.00 12.26 12.00 3.23 3.00 12.26 12.00 3.24 4.00 15.38 8.00 4.22 4.00 15.38 10.00 3.23 3.00 12.06 12.00 3.24 12.00 12.39 12.00 3.25 2.00 9.65 9.00 2.16 2.00 12.39 12.00 3.26 2.00 9.65 9.00 3.27 2.00 9.65 9.00 3.28 3.00 12.06 12.00 3.29 2.00 9.65 9.00 3.20 12.20 12.20 12.00 3.21 2.00 9.65 9.00 3.22 2.00 9.65 9.00 3.23 3.00 12.06 12.00 3.24 2.00 9.65 9.00 3.25 2.00 9.65 9.00 3.26 2.00 9.65 9.00 3.27 2.00 12.26 12.00 3.28 2.00 9.65 9.00 3.28 2.00 9.65 9.00 3.29 2.00 9.65 9.00 3.20 2.00 9.65 9.00 3.22 2.00 9.65 9.00 3.22 2.00 9.65 9.00 3.23 3.00 12.55 12.00 3.24 3.25 3.00 12.26 12.00 3.25 3.20 3.00 12.26 12.00 3.25 3.20 3.00 12.26 12.00 3.25 3.20 3.00 12.35 12.00 3.25 3.20 3.00 12.25 12.00 3.25 3.20 3.00 12.35 12.00 3.25 3.20 3.00 12.55 12.00 3.25 3.20 3.00 12.55 12.00 3.25 3.20 3.00 12.55 12.00 3.25 3.20 9.00 9.65 9.00 3.25 3.20 9.65 9.00 3.25 3.20 9.65 9.00 3.25 3.20 9.00 9.65 9.00 3.25 3.20 9.00 9.65 9.00 3.25 3.20	Found Cuar. Found Guar. Found	Found Cuar. Found Guar. Found Guar.

TABLE IV CROUND BONE FERTILIZERS-FURNISHING NITROGEN AND PHOSPHORIC ACID

MANUFACTURED AND DRANG MAME		OGEN	PHOSPHO	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.
	P. ct.	P. et.	P. et.	P. ct.
AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y.	2,50	2.47	24,50	23,00
ne Ground Bone (2020) ne Ground Bone (2967) ne Ground Bone (3593)	*2.08 *2.05	2.47	23,90 30,10	23,00 23,00
ne Ground Bone (3595) re Raw Bone (3552)	4.53	3.70	24.70	20.00
ARMOUR FERTILIZER WORKS, Baltimore, Md.	2.58	2,47	27,50	23.00
mour's Bone Meal (2884) mour's Bone Meal (3536)	3,19	2,47	26.00 21.00	23.00
mour's Raw Bone Meal (2883)	3.71	0.10	22.00	20200
BAUGH & SONS CO., Fhiladelphia, Pa. ugh's Pure Steamed Bone Meal (3323) ugh's Raw Bone Meal (3875)	2.63 3.56	2,47	24,50 22,20	23,00 20,00
THE DAVISON CHEMICAL CORP., Baltimore, Md.	2.89	2.47	23,90	23.00
ne Bone Meal (2965) GRIFFITH & BOYD CO., Baltimore, Md.	3.78	3,70	22,10	20.00
re Fine Ground Bone Meal (3065) INDEPENDENT MANUFACTURING CO., Philadelphia, Pa.				23.00
pecial Florists Bone Meal (3357) F. S. ROYSTER GUANO CO., Baltimore, Md.	2.49	2.47	27.50	
weter Fine Ground Bone Meal (3154) SWIFT & COMPANY FERTILIZER WORKS, Baltimore, Md.	2.91	2.47	23,80	22.90
SWIFT & COMPANY FERTILIZER WORKS, Baltimore, md. www.mw Bone Meal Pertilizer (3650) wift's 2-26 Bone Pertilizer (3782)	4.31 2.01	3.70 2.00	22.00 27.20	20.00 26.00
Average	3.02		24.74	
WAGLERA	0.02			
Deficient				

MANIFACTIOED AND DOAND NAME	Tot	al	PHOSPHO		Inso	luble
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	Gua
	P. ct.	P. et.	P. et.	P. ct.	P. ct.	P. ct
SUPERPHOSPHATE FERTILIZERS						
ACME GUANO CO., Baltimore, Md.			10 50	16.00		
me 16% Superphosphate (3176) me 16% Superphosphate (3814)			16.58 17.40	16.00 16.00		
me 20% Superphosphate (3174)			20.40	20.00		
me 20% Superphosphate (3847)						
THE AMERICAN AGRICULTURAL CHEMICAL CO. New York, N. Y.			17.40	16.00		
Superphosphate 16% (2785) Superphosphate 16% (2824)			16.30	16,00		
Superphosphate 16% (2857) Superphosphate 16% (3299)			16.04 16.14	16.00 16.00		
Superphosphate 16% (3408) Superphosphate 16% (3414)			17.80 17.08	16.00 16.00		
Superphosphate 16% (3488)			18.26 16.35	16.00 16.00	,	
Superphosphate 16% (3574) Superphosphate 16% (3577)			17.64 17.56	16.00 16.00		
Superphoephate 16% (3689) Superphosphate 16% (3745)			18.32	16.00 16.00		
Superphosphate 16% (3885) Superphosphate 20% (2786)			16.80 20.84	20.00		
Superphosphate 20% (2821) Superphosphate 20% (2905)			20.60	20.00		
Superphosphate 20% (3410) A Superphosphate 20% (3489)			21.78	20.00		
Superphosphate 20% (3543)			21.46	20.00		
Superphosphate 20% (3875) Superphosphate 20% (3880)			21.76	20.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md. rmour's 81g Crop Superphosphate 16% (2871)			16.54	16.00		
			16.46 16.18	16.00 16.00		
mour's Big Crop Superphosphate 16% (3099) mour's Big Crop Superphosphate 16% (3656)			16.56 16.70	16.00		
mour's Big Crop Superphosphate 16% (3694)			17.64 21.38	16.00		
mour's Big Crop Superphosphate 20% (2882)			20.88	20.00		
rmour's Big Crop Superphosphate 20% (2982) rmour'e Big Crop Superphosphate 20% (3013)			21.12	20.00		
rmour's Big Crop Superphosphate 20% (3100) rmour's Big Crop Superphosphate 20% (3535)			20.00	20.00		
rmour's Big Crop Superphosphata 20% (3604) rmour's Big Crop Superphosphate 20% (3655)			21.96 20.36	20.00	,	
mounts Rig Cron Superphosphate 20% (3090)			20.44 21.68	20.00		
rmour's Big Crop Superphosphate 20% (3703)						
BALTIMORE FERTILIZER CO., Baltimore, Md. onest Superphosphate 16% (3271)			16.32 21.04	16.00 20.00		
onest Suparphosphate 20% (2846) onest Superphosphata 20% (3824)			21.60	20.00		
CATTON & CONG COMPANY Philadelphia Pa-			16.68	16.00		
aughphos The Ideal 16% Superphosphate (2715) aughphos The Ideal 16% Superphosphate (3008)			17.32	16.00 16.00		
aughphos The Ideal 16% Superphosphata (3083) aughphos Tha Ideal 16% Superphosphate (3226)			16.22 17.84	16.00		
aughphos The Ideal 16% Superphosphate (3374)			17.80	16.00		
aughphos The Ideal 16% Superphosphate (3891)			18.18 20.54	16.00		
aughphos The Ideal 16% Superphosphate (3008) aughphos The Ideal 16% Superphosphata (3083) aughphos Tha Ideal 16% Superphosphate (3226) aughphos The Ideal 16% Superphosphate (3374) aughphos The Ideal 16% Superphosphate (3374) aughphos The Ideal 16% Superphosphate (3394) aughphos The Ideal 20% Superphosphate (3591) aughphos The Ideal 20% Superphosphate (3007) aughphos Tha Ideal 20% Superphosphate (3007) aughphos The Ideal 20% Superphosphate (3008) aughphos The Ideal 20% Superphosphate (3089) aughphos The Ideal 20% Superphosphate (3238) aughphos The Ideal 20% Superphosphate (3238) aughphos The Ideal 20% Superphosphate (32494)			21.56	20.00		
aughphos The Ideal 20% Superphosphate (3089)			20.74	20.00		
aughphos The Ideal 20% Superphosphate (3256) aughphos The Ideal 20% Superphosphate (3494)	1		20.68 20.83	20.00		
aughphos The Ideal 20% Superphosphate (3571) aughphos Tha Ideal 20% Superphosphate (3871)			20.52	20.00		
RERBERT BRYANT, INC., Alexandria, Va. ryant Righ Grade 16% Phosphate (3042)			16.14	16.00		
CARLISLE FERTILIZER WORKS, INC.,						
Carlisle, Pa.			17.40	16.00		
arlisle Superphosphate 16% (3023)			17.24	16.00		
CENTRAL CHEMICAL CORPORATION OF MARYLAND, Regerstown, Md.				30.00		
Parmrite Superphosphate 16% (2697)			17.08 16.80	16.00		
armrite Superphosphate 16% (3080) armrite Superphosphate 16% (3165)			16.06 16.12	16.00 16.00		
armrite Superphosphata 16% (3248) armrite Superphosphate 16% (3611)			17.20 17.80	16.00		
armrite Superphosphate 16% (3755)			21.72 20.66	20.00		
Farmrite Superphosphate 20% (3051)			20.20	20.00		
Parmrite Superphosphate 20% (3610)			21,10			
COOPERATIVE FEED DEALERS, INC., Binghamton, N. Y.			17.44	16.00		
Binghamton, N. Y. C.F.D. 16% Superphosphate (2710) C.F.D. 16% Superphosphate (3248) C.F.D. 16% Superphosphate (3481) C.F.D. 16% Superphosphate (3481) C.F.D. 20% Superphosphate (3481) C.F.D. 20% Superphosphate (2709) C.F.D. 20% Superphosphate (3400) C.F.D. 20% Superphosphate (3671) C.F.D. 32% Superphosphate (2711) C.F.D. 32% Superphosphate (3249)	1		16.74 16.84	16.00 16.00		
C.F.D. 16% Superphosphate (3388) C.F.D. 16% Superphosphate (3481)			17.46 21.46	16.00 20.00		
C.F.D. 20% Superphosphate (2709)			20.56	20.00		
F.D. 20% Superphosphate (3671)			21.76 32.72	32.00		
.R.D. 32% Superphosphate (2711)	1		35.92	32.00		

				RIC ACID			
MANUFACTURER AND BRAND NAME	To		-	lable	Insoluble Found Guar.		
	Found P. et.	Guar. P. et.	Found P. ct.	Guar. P. et.	P. ct.	P. ct.	
COOPERATIVE G.L.F. SOIL BUILDING SERVICE, INC., New York, N. Y. G.L.F. 16% Superphosphate (2726) G.L.F. 20% Superphosphate (Gran-Phosphate) (2721) G.L.F. 20% Superphosphate (Gran-Phosphate) (3891) G.L.F. 20% Superphosphate (Gran-Phosphate) (3397) G.L.F. 20% Superphosphate (Gran-Phosphate) (3397) G.L.F. 32% Superphosphate (Gran-Phosphate) (2719)	r.et.	F. Ct.	16.46 21.26 20.94 20.28 21.40 32.31	16.00 20.00 20.00 20.00 20.00 20.00 32.00		1.66.	
COOPERATIVE SOUTHERN STATES FERTILIZER SERVICE, INC., Baltimore, Md. Farm Bureau 20% Granulated Superphosphate (3766)			21.94	20.00			
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippeneburg, Pa. Old Reliable Superphosphate 16% (2853) Old Reliable Superphosphate 16% (3852) Old Reliable Superphosphate 20% (2851) Old Reliable Superphosphate 20% (3830)			16.60 17.40 *17.36 *19.28	16.00 16.00 20.00 20.00			
THE DAVISON CHEMICAL CORPORATION, Baltimora, Md. Davco Granulated 20% Superphosphata (2761) Davco Granulated 20% Superphosphate (2958) Davco Granulated 20% Superphosphate (3262) Davco Granulated 20% Superphosphate (3446) Davco Granulated 20% Superphosphate (3565) Davco Granulated 20% Superphosphate (3727) Davco Granulated 20% Superphosphate (3747) Davco Granulated 20% Superphosphate (3747) Davco Granulated 20% Superphosphate (3770)			20.42 21.22 20.08 21.66 22.14 21.60 21.40 21.94	20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00			
THE DAVISON CHEMICAL CORPORATION, Alliance, Ohio Old Reliable 20% Superphosphate (3776)			21.36	20.00			
EASTERN STATES FARMERS EXCHANGE, Springfield, Mase. Eastern States 20% Granular Superphosphate (3277) Eastern States 20% Granular Superphosphate (3288) Eastern States 20% Superphosphate (323) Eastern States 20% Superphosphate (3276) Eastern States 20% Superphosphate (3866) Eastern States 40% Double Superphosphate (3022)			20.06 20.12 20.64 20.90 21.24 40.64	20.00 20.00 20.00 20.00 20.00 40.00			
ERIE REDUCTION COMPANY, Erie, Pa. Erie Superphosphate 16% (2937) Erie Superphosphate 20% (2938)			17.78 20.84	16.00 20.00			
GRIFFITH & BOYD CO., Beltimore, Md. High Grade 16% Superphosphate (3078) High Grade 16% Superphosphate (3095) High Grade 16% Superphosphate (3733) 20% Superphosphate (3073) 20% Superphosphate (3407) 20% Superphosphate (3737)			16.28 16.12 18.48 20.86 21.94 21.80	16.00 16.00 16.00 20.00 20.00 20.00			
INTERNATIONAL AGRICULTURAL CORPORATION, Buffalo, N. Y. International Superphosphate 16% (2941) International Superphosphate 20% (2942)			16.92 20.74	16.00 20.00			
KOLLER FERTILIZER COMPANY, York, Pa. Koller's High Grade Superphosphate 16% (3214) Koller's High Grade Superphosphate 16% (3612) Koller's High Grade Superphosphate 16% (3662) Koller's High Grade Superphosphate 20% (3611) Koller's Righ Grade Superphosphate 20% (3848)			16.12 17.48 16.80 20.86 20.34	16.00 16.00 16.00 20.00 20.00			
Lancaster Bone FertiLizer CO., Inc., Quarrywille, Pa. Conestoga Superphoephate 18% (3216) Conestoga Superphoephata 18% (3879)			18.28 19.08	18.00 18.00			
LKBANOW FERTILIZER WORKS, Lehanou, Fa. Levan's Superphosphate 16% (2746) Levan's Superphosphate 16% (3672) Levan's Superphosphate 20% (3880)			16.60 16.64 21.00	16.00 16.00 20.00			
MILLER CHEMICAL & FERTILIZER CORPORATION, Baltimore, Md. Rich Yield 16% Superphosphate (3056) Rich Yield 16% Superphoephate (3438) Rich Yield 16% Superphosphate (3462)			16.76 17.04 17.22	16.00 16.00 16.00			
READING BONE FERTILIZER CO., Reading, Pa. 16% Clear Acid Phoephate (2836) 16% Clear Acid Phoephate (3006) 16% Clear Acid Phoephate (3377) 20% Clear Acid Phoephate (2837) 20% Clear Acid Phoephate (3006) 20% Clear Acid Phoephate (3006)			17.12 16.48 17.22 20.98 20.98 21.86	16.00 16.00 16.00 20.00 20.00 20.00		X	
ROBERT A. REICHARD, INC., Alleutown, Pa. Reichard's Famous 18% Acid Phosphate (2985)			17.70	16,00			
F. S. ROYSTER GUANO CC., Baltimora, Md. Royster Superphosphate 16% (2775) Royster Superphosphate 16% (3145) Royster Superphosphate 16% (3699) Royster Superphosphate 20% (2770) Royster Superphosphate 20% (3086) Royster Superphosphate 20% (3588) Royster Superphosphate 20% (3617)			16.98 16.08 16.82 21.96 20.22 20.96 20.12	16.00 16.00 16.00 20.00 20.00 20.00 20.00			
*Deficient							

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

			PHOSPHO		Insol	ubla -
MANUFACTURER AND BRAND NAME	Found	Guar,	Avail Found	Guar.	Found	Guar.
	P. ct.	P, ct.	P. et.	P. ct.	P. et.	P. et.
M. L. SHOEMAKER & CO., INC., Philadelphia, Pa. noemaker's Swift Sure Supsrphosphate 16% (3309) noemaker's Swift Sure Superphosphate 16% (3635)			16.46 16.08	16.00 16.00		
THE SMITH AGRICULTURAL CHEMICAL CO., Columbus, Ohio acco Superphosphate 16% (3602) acco Superphosphate 20% (3601)			16,76 21,13	16.00 20.00		
SUMMERS FERTILIZER CO., Baltimore, Md. Summers 20% Superphosphate (3437) Summers 20% Superphosphate (3713)			21.56 21.76	20,00 20,00		
SWACK FERTILIZER CO., DuBois, Pa. wack's 16% Superphosphate (3015) wack's 16% Superphosphate (3729) wack's 20% Superphosphate (2768) wack's 20% Superphosphate (3014) wack's 20% Superphosphate (3607) wack's 20% Superphosphate (3730) wack's 20% Superphosphate (3791)			16.24 17.48 21.36 20.12 21.80 21.76 21.10	16.00 16.00 20.00 20.00 20.00 20.00 20.00		
SWIFT & COMPANY FERTILIZER WORKS, Baltimore, Md. Baltimore, Md. Swift's Red Steer Superphosphate 16% (2897) Swift's Red Steer Superphosphate 16% (3789) Swift's Red Steer Superphosphate 20% (2898) Swift's Red Steer Superphosphate 20% (3642) Swift's Red Steer Superphosphate 20% (3784)			17.66 16.08 17.00 20.86 20.62 22.14	16.00 16.00 16.00 20.00 20.00 20.00		
TRENTON BONE FERTILIZER CO., Trenton, N. J. Trenton Superphosphate 16% (3325)			16.34	16.00		
F. W. TUNNELL & CO., INC., Philadelphia, Pa. Tunnsll's 16% Superphosphate (3510) Tunnell's 20% Superphosphate (3509)			16.84 20.68	16.00 20.00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Baltimore, Md. V-C 16% Superphosphate (2755) V-C 16% Superphosphate (3069) V-C 16% Superphosphate (3368) V-C 16% Superphosphate (3584) V-C 20% Superphosphate (3067) V-C 20% Superphosphate (3583) V-C 20% Superphosphate (3869)			16.88 16.34 17.22 17.06 20.64 21.88 22.20	16.00 16.00 16.00 16.00 20.00 20.00		
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Superphosphate 16% (3185) Dempwolf's Superphosphate 16% (3845) Dempwolf's Superphosphate 20% (2729) Dempwolf's Superphosphate 20% (3187) Dempwolf's Superphosphate 20% (3844)			16,28 18,20 20,04 20,64 21,08	16.00 16.00 20.00 20.00 20.00		
YORK STONE & SUPPLY CO., York, Pa. Cramer's York Superphosphate 16% (3795) Cramer's York Superphosphate 20% (3203) Cramer's York Superphosphate 20% (3797)			18,36 20,44 21,36	16.00 20.00 20.00		

TABLE V. SUPERPHOSPHATE AND LIME PHOSPHATE FERTILIZERS—FURNISHING PHOSPHORIC ACID

MANUFACTURED AND DOLLAR MANE	To	- 1	PHOSPHO Avai	RIC ACID	Insol	ublo
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	Found	uble Guar.
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
LIME PHOSPHATE FERTILIZERS						
ACME GUANO COMPANY, Baltimore, Md. cme Lime Phosphate 16% (3170) cme Lime Phosphate 16% (3820)			16.14 16.32	16.00 16.00		
			10.02	10.00		
THE AMERICAN AGRICULTURAL CHEMICAL COMPANY,						
New York, N. Y. A Basic Lime Phosphate 16% (2855) A Basic Lime Phosphate 16% (3385)			16.14 17.00	16.00 16.00		
A Beeic Lime Phosphate 16% (3504)			17.72	16.00		
ARMOUR FERTILIZER WORKS, Baltimore, Md.			16.54	16,00		
rmour's Big Crop Lime Phoephate 16% (2873)			10.54	10.00		
BAUCH & SONS COMPANY, Philadelphia, Pa. Baugh's Lime and Phoephate 16% (3090)			16.06	16.00		
CARLISLE FERTILIZER WORKS, INC.,						
Carlisle, Pa. arlisle Lime Phoephate 16% (2841)			15.98	16,00		
arlisle Lime Phoephate 16% (3822)			17.16	16.00		
CENTRAL CHEMICAL CORPORATION OF MARYLAND,						
Hageretown, Md. armrite Carbo Lime Phosphate 16% (3161)			16.16	16,00		
GRIFFITH & BOYD CO., Baltimore, Md.						
ime Phosphate 16% (3421) ime Phosphate 16% (3498)			17.24 17.20	16.00 16.00		
			1. 420	70.00		
LEBANON FERTILIZER WORKS, Lebanon, Pa. evan'e Lime Phosphate 16% (3678)			16.80	16.00		
PENNSYLVANIA FARM BUREAU COOPERATIVE						
ASSOCIATION, INC., Harrieburg, Pa. Superphosphate with Lime 16% (3426)			16.72	16.00		
F. S. ROYSTER GUANO CO., Baltimore, Md.						
oyster Lime Phosphate 16% (3721)			17.48	16,00		
VIRGINIA-CAROLINA CHEMICAL CORPORATION,						
Baltimore, Md. '-C Phosphate and Lime Mixture 16% (3369)			17.82	16.00		
YORK CHEMICAL WORKS, York, Pa. Dempwolf's Lime Phosphate 16% (3188) Dempwolf's Lime Phosphate 16% (3841)			16.12 16.80	16.00 16.00		
			16.74			
Average			10.14			
			1. 1. 1. 1.			

WANTEACHIDED AND DRAND MAYE		LABLE DRIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	As Muriate
	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
ACME GUANO COMPANY, Baltimore, Md. Acme 0-12-5 (3171) Acme 0-12-5 (3817)	12.06 12.55	12.00 12.00	5.11 5.10	5.00 5.00	
THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. AA Victory Mixtura 0-12-5 (2856) AA Victory Mixtura 0-12-5 (3883) AA Victory Mixtura 0-12-5 (3659) AA Victory Mixtura 0-12-5 (3693) AA Victory Mixtura 0-12-5 (3740) AA XXX Mixtura 0-10-10 (2864) AA XXX Mixtura 0-10-10 (3885) AA XXX Mixtura 0-10-10 (3487) AA XXX Mixtura 0-10-10 (3685)	11.98 12.56 11.98 12.94 12.20 10.61 10.17 10.78 11.34	12,00 12.00 12,00 12,00 12.00 10,00 10,00 10.00	4.87 5.03 4.84 4.92 5.63 10.07 10.66 10.97 9.90	5.00 5.00 5.00 5.00 5.00 10.00 10.00 10.00	
ARMOUR FERTILIZER WORKS, 8sltimore, Md. Armour's 81g Crop O-10-10 Fertilizer (2916) Armour's 81g Crop O-10-10 Fertilizer (2105) Armour's 81g Crop O-14-6 Fertilizer (28B1) Armour's 81g Crop O-14-6 Fertilizer (3106) Armour's 81g Crop O-14-6 Fertilizer (3455) Armour's B1g Crop O-14-6 Fertilizer (3653) Armour's B1g Crop O-14-6 Fertilizer (3704)	10.37 10.16 14.40 14.06 15.02 14.50	10.00 10.00 14.00 14.00 14.00 14.00	10.14 *9.60 6.00 6.14 *5.76 6.08 *5.72	10.00 10.00 6.00 6.00 6.00 6.00 6.00	
8ALTIMORE FERTILIZER CO., Baltimore, Md. Ronast 0-12-5 (2B43) Ronest 0-12-5 (3270) Ronest 0-12-5 (382B)	12.10 13.34 13.97	12.00 12.00 12.00	5.33 5.59 *4.71	5.00 5.00 5.00	
BAUGH & SONS CO., Fhiladelphia, Pa. Baugh's Phosphate and Potash Mixture 0-10-10 (3126) Baugh's Phosphata and Potash Mixture 0-10-10 (3632)	10.23	10.00	10.01 *B.84	10.00	
Baugh's Phosphate and Potash Mixture 0-12-5	12.10	12,00	5.07	5.00	
Baugh's Phosphata and Potash Mixture 0-12-5 (3401)	12.08	12.00	5.18	5.00	
8augh's Phosphate and Potash Mixture 0-14-6 (3117)	14.20	14.00	6.02	6.00	
CENTRAL CHEMICAL CORPORATION OF MARYLAND, Ragerstown, Md. Farmrita Fertilizer 0-10-10 (26B9) Farmrita Fertilizer 0-10-10 (3705) Farmrita Potash Special 0-12-5 (3163) Farmrita Potash Special 0-12-5 (3469)	*9.30 10.80 12.09 12.23	10.00 10.00 12.00 12.00	10.53 10.89 *4.65 5.10	10.00 10.00 5.00 5.00	
COOPERATIVE PEED DEALERS, INC., 81mghamton, N. Y. C.F.D. 0-10-10 (3669)	11.45	10.00	*9.67	10.00	
CUMBERLAND VALLEY COOPERATIVE ASSOCIATION, Shippensburg, Pa. Old Reliable Valley Special 0-12-5 (2849)	11.B8	12,00	6.18	5.00	
EASTERN STATES FARMERS EXCHANGE, Springfield, Maas. Eastern States 0-20-20 (3274) Eastern Ststas 0-20-20 (3286) Eastern States 0-28-12 (3032) Eastern States 0-28-12 (3272) Eastern States 0-28-12 (3296)	20.12 20.68 28.32 28.52 28.52	20.00 20.00 28.00 28.00 28.00	20.58 22.44 13.00 13.68 13.27	20.00 20.00 12.00 12.00	
GRIFFITH & BOYD CO., Baltimore, Md. Phosphata and Potash 0-14-6 (3423)	14.24	14.00	6.00	6.00	
KOLLER FERTILIZER CO., York, Pa. Koller's Electric Phosphate 0-12-5 (3805) Kollar's Electric Phosphate 0-12-5 (3853)	13.10 12.49	12.00	5.75 5.27	5.00 5.00	
LANCASTER BONE FERTILIZER CO., INC., Quarryvilla, Pa. Conastoga 0-12-5 (3225) Conestoga 0-12-5 (3878)	12.53 12.62	12.00 12.00	5.33 *3.74	5.00 5.00	
LEBANON FERTILIZER WORKS, Labanon, Pa. Levan's 0-12-5 (3679)	12.14	12,00	5.12	5.00	
FRED E. LORD, INC., Espy, Pa. Lord's 0-12-5 (3362)	12.20	12,00	5.40	5.00	00000
MILLER CHEMICAL & FERTILIZER CORP., 8altimore, Md. Rich Yield 0-10-10 (3461) Rich Yield 0-12-5 (3459)	9.90 11.97	10.00 12.00	10.47 5.36	10.00 5.00	
FENNSYLVANIA FARM SUREAU COOPERATIVE ASSOCIATION, INC., Rarrisburg, Ps. Farm Sureau 0-10-10 (3425) Farm Bureau 0-14-6 (3764)	9.86 14.72	10.00 14.00	10.74 7.36	10.00	
READING BONE FERTILIZER CO., Reading, Pa. Reading Phosphate and Potssh O-12-5 (2833) Reading Phosphate and Potssh O-12-5 (3004)	12.29	12.00 12.00	5.21 5.10	5.00 5.00	
F. S. ROYSTER GUANO CO., Saltimore, Md. Royster Phosphate and Potssh 0-12-5 (3151) Royeter Phosphata and Potssh 0-14-6 (2797) Royeter Phosphate and Potssh 0-14-6 (3720)	12.92 14.88 15.66	12.00 14.00 14.00	5.26 6.63 *5.26	5.00 6.00 6.00	**************************************
*Deficient					

MANUFACTURED AND DRAWN	AVAI	LABLE ORIC ACID		POTASH	
MANUFACTURER AND BRAND NAME	Found	Guar.	Found	Guar.	As Muriet
•	P. ct.	P. et.	P. et.	P. ct.	P. ct.
SWACK FERTILIZER CO., DuBois, Pa. eck's 0-12-5 (3017)	12.20	12.00	5.16	5.00	
F. W. TUNNELL & CO., INC., Philedelphia, Pe.					
nnell's 0-12-5 Fartilizer (2737) nnell's 0-12-5 Fertilizer (2910) nnell'e 0-12-5 Fertilizer (3511)	12.20 12.70 12.28	12.00 12.00 12.00	5.37 5.97 5.26	5.00 5.00 5.00	
VIRGINIA-CAROLINA CHEMICAL CORPORATION, Beltimore, Md. C 0-12-5 Fertilizer (2746)	12,96	12.00	5.35	5.00	
	12.50	12.00	0.00	0.00	
YORK CHEMICAL WORKS, York, Pa. apwolf'e 0-10-10 (3190) apwolf's 0-10-10 (3836) apwolf's 0-12-5 (3183) apwolf's 0-12-5 (3843)	10.65 10.29 12.08 12.55	10.00 10.00 12.00 12.00	10.01 10.09 5.07 5.79	10.00 10.00 5.00 5.00	
YORK STONE & SUPPLY CO., York, Pe. amer's York O-12-5 (3206) amsr's York O-12-5 (3802)	12.48 12.98	12.00 12.00	6.14 6.12	5.00 5.00	
Averegs	13.32		7.43		
	35.000				
			1		

TABLE VII. MISCELLANEOUS FERTILIZERS

—	1	-											-							
	As	Muriate	P. ct.		-				1		!						-		į	
POTASH		Guar.	P. ct.						ļ	ł	İ			5	3	20.00				·
		r ound	P. ct.			1					i			2,00		92*10	51,70			
	ple	Guar.	P. ct.		i					1							1		0.75	
	Insoluble	Found	P. ct.			1	1				!						-		0.24	
IC ACID	Available	Guar.	P. ct.		1	!				1		-		ļ			-		2.00	
PHOSPHORIC ACID	Avails	Found	P. ct.		-	i						-				ı			92°2	
		Guar.	P. ct.		i	-	1		i	i	1	1			ļ		-		2,75	
	Total	Found	P. ct.			i	-					-				-			2,50	
EN		Guar.	P. ct.		16.00	16.00	-		20.50	20.56	20.50	!		!	:				00.9	
NITROGEN	2	r ourid	P. ct.		16,28	16.10	16,19		20.94	20.90	21,10	86.02			;		!		6.07	
MANITEACTION AND BRAND NAME	MANUFACIURER AND BRAND NAME			NITRATE OF SODA	THE BARRETT COMPANY, New York, N. Y. Arcadian The American Nitrata of Soda (2991)	CHILEAN NITRATE SALES CORPORATION, New York, N. Y. Champion Brend Chileen Nitrate of Soda (2960)	Averaga	SULPHATE OF AMMONIA	THE AMEHICAN ACRICULTURAL CHEMICAL COMPANY, Now York, N. Y. Sulphate of Armonia (2968)	THE BARRETT COMPANY, New York, N. Y. Sulphate of Armonia (2959)	EASTERN STATES FARMERS EXCHANGE, Springfield, Mass.	Avoraga	MURIATE OF POTASH	THE AMERICAN ACRICULTURAL CHEMICAL COMPANY, New York, N. Y. Muriate of Potash (2851)	N. V. POTASH EXPOHT MY., INC., Baltimore, Md. Muriate of Potash (3586)		Avarage	MISCELLANEOUS	SEWERAGE COMMISSION, Milwaukee, Wis. Milorganite Fertilizer (2830)	